



'RPLQLFDQ 8QLYHUVLW\ RI &DC
\$GXOW 'HJUHH &RPSOHWLRQ 3U
*HQHUDO (GXFDWLRQ DQG \$GP
, QIRUPDWLRQ
\$FDGHPLF &DWDORJ

7DEOH RI &RQWHQWV IRU \$GXOW '
&RPSOHWLRQ '\$& 3URJUDPV
*HQHUDO (GXFDWLRQ DQG \$GPLVV
,QIRUPDWLRQ

'& 'HJUHH 3URJUDPV

%XVLQHVV \$GPLQLVWUDWLRQ %\$ ±)DVW
ODQDJHPHQW %\$ ±)OH[
(QJOLVK DQG (QJOLVK ZLWK D :ULWLQJ (PSKDVLV ODMRUV %\$ DQG 0LQRUV
+XPDQLWLHV DQG &XOWXUDO 6WXGLHV %\$
/LWHUDU\ DQG ,QWHUFXOWXUDO 6WXGLHV %\$
3V\FKRORJ\ %\$ 0LQRU

'& *HQHUDO (GXFDWLRQ DQG \$GPLVVLRQV ,QIRUPDWLRQ

'& 3URJUDPV %\$
\$GPLVVLRQ 5HTXLUHPHQWV
,QWHUQDWLRQDO 6WXGHQWV \$GPLVVLRQ 5HTXLUHPHQWV
&UHGLW +RXU 3ROLF\
ODWK 3ODFHPHQW 3ROLF\
*HQHUDO (GXFDWLRQ 6WDWHPHQW RI 3XUSR VH *RDOV
*HQHUDO (GXFDWLRQ 2YHUYLHZ
*HQHUDO (GXFDWLRQ 3URJUDP DQG &RXUVHV

\$GXOW 'HJUHH &RPSOHWLRQ 'HJUHH

\$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP

\$GPLQLVWUDWLRQ %\$ ±)DVW

7KLV SURJUDP LV QRW DFFHSWLQJ DSSOLFDWLRQV IRU

7KH %DURZVN\ 6FKRRO RI %XVLQHVV RIIHUV WZR RSWLRQV IRU DGXOW OHDUQHUV V
FRQWLQLQJ WR IXOILOO FDUHH\DFGGOBPLD\ \$UW\$RQV%EXLQDMVRS%G%DEKMDRDRIR
ODQDJHPHQW)OH[

7KH %DFKHORU RI \$UWV LQ %XVLQHVV \$GPLQLVWUDWLRQ %\$%\$ \$GXOW 'HJUHH &R
SURIHVVLQRQDOV ZLWK D WKRURXJK JURXQGLQJ LQ FODVVL EXVLQHVV WKHRU\ DQG
RSSRUWXQLWLHV IDFHG E\ EXVLQHVV LQ WKH ZRUOG\J JOREDO HFRQRP\ 6WXGHQW
DUHDV ZLWKLQ EXVLQHVV DFFRXQWLQJ ILQDQFH RUJDQL]DWLRQDO PDQDJHPHQW
XQGHUVWDQG KRZ WKHVH DUHDV LPSDFW RQH DQRWKHU FRQWULEXWLQJ WR DQ RU
VXVWLQDEOH RUJDQL]DWLRQV UHVXOW IURP HWKLFDO DQG VRFLDO\ UHVSQVLE
EXVLQHVV SUDFWLFHV DQG D JOREDO PLQGVHW WKH SURJUDP RIIHUV DQ LQWHU
DQG JOREDOL]DWLRQ WKURXJKRXW WKH FXUULFXOXP *UDGXDWHV RI WKLV GHJUHH
RUJDQL]DWLRQV WKDW PDNH D SRVLWLYH GLIIHUHQFH LQ WKH ZRUOG

%XVLQHVV \$GXOW 'HJUHH &RPSOHWLRQ '\$& VWXGHQWV PD\ FRPSOHWH RQH RI WK
'D\ 3URJUDP LI WKH VWXGHQW LV DYDLODEOH WR WDNH FRQFHQWUDWLRQ FRXUVHV
3UHUHTXLVLWH UHTXLUHPHQWV IRU WKH FRQFHQWUDWLRQ FRXUVHV PD\ EH PHW E\
FRXUVH SULRU WR HQUROOLQJ LQ D FRQFHQWUDWLRQ FRXUVH

\$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP

\$GPLQLVWUDWLRQ 3URJUDP

7KH %\$ WR 0%\$ PD\ EH DGYDQWDJHRXV WR %XVLQHVV \$GPLQLVWUDWLRQ PDMR
+DYH DYDLODEOH HOHFWLYH FUHGLW DQG RU
+DYH WDNHQ ORZHU GLYLVLQRQ FRXUVHV EHIRUH PDWULFXODWLRQ ZLWK FRQW
FRXUVHV 7KHVH FRXUVHV ZLOO XVXDOO\ EH LQ DFFRXQWLQJ DQG RU HFRQRP

&XUUHQWO\ WKH RSWLRQ LV DYDLODEOH IRU WKH 0%\$ 3URJUDP

*HQHUDO 5HTXLUHPHQWV IRU \$GPLVLRQ WR 3URJUDP

0LQLPXP FXPXODWLYH *3\$ RI
-XQLRU VWDQGLQJ XQLWV FRPSOHWHG
3UHUHTXLVLWH FRXUVHV WDNHQ LQ \$FFRXQWLQJ (FRQRPLFV 6WDWLWLVFV

\$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP %XVLQHVV \$GPLQLV
 3UHUHTXLVLWH &RXUVH (TXLYDOHQWV

%XVLQHVV \$GPL	
%86	6WDWLVLWLFV 5HVHDFK IR
(&21	(FRQRPLFV IRU *OREDO %XV

*UDGXDWH FRXUVH RSWLRQV WR PHHW XQGHUJUDGXDWH GHJUHH
 " XQLWV HOHFWLYH JUDGXDWH FODVVHV DQG RU
 " XQLWV WR PHHW WKH XSSHU GLYLVLQRQ XQLW UHTXLUHPHQW 7KLV ZLOO XV
 FRXUVHV WKDW KDYH FRYHUHG VRPH RI WKH VDPH FRQWHQW DV XSSHU GLYL

\$ PD[LPXP RI JUDGXDWH XQLWV PD\ EH WDNHQ DW WKH XQGHUJUDGXDWH OHYHO
 OHYHO FODVVHV 7KHUHIRUH WKH PD[LPXP SURJUHVV WRZDUG WKH JUDGXDWH GH
 SUHUHTXLVLWHV ZLWK FRXUVHV DW WKH XQGHUJUDGXDWH OHYHO

7KH PDMRU GLIIHUHQFH EHWZHHQ WKH \$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP %\$ LG
 \$GPLQLVWUDWLRQ 'D\ 'HJUHH LV WKDW VWXGHQWV LQ WKH 'D\ 3URJUDP PD\ WDNH
 JUDGXDWH DQG XQGHUJUDGXDWH PDMRUV 7KLV RSWLRQ LV QRW DYDLODEOH LQ W
 \$GPLQLVWUDWLRQ EHFDXVH LW LV D XQLW PDMRU ZKLOH WKH %XVLQHVV \$GPLQL

3URJUDP /H DUQLQJ 2XWFRPHV

6WXGHQWV ZKR FRPSOHWH WKH \$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP IRU WKH %XV
 %XVLQHVV .QRZOHGJH &RPSHWHQF\ 2EWDLQ DQG LQWHJUDWH NQRZOHGJH D
 &RPPXQLFDWLRQV &RPSHWHQF\ 8VH ZULWWHQ DQG RUDO FRPPXQLFDWLRQ H
 \$QDO\WLF DQG 'HFLVLQRQ 0DNLQJ &RPSHWHQF\ &RQGXFV UHVHDFK DQG DSS
 EXVLQHVV SUREOHPV
 *OREDO %XVLQHVV &RPSHWHQF\ 8QGHUVWDQG WKH LPSDFW RI JOREDOL]DWL
 (WKLFDQ /HDGHUVKLS DQG &RUSRUDWH 6RFLDOL]DWLRQV H&RPSHWHQF\ &RPSHWHQF\
 EXVLQHVV SUDFWLFHV

\$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP \$GPLQLVWUDWLRQ %\$ 5HTXLUHPHQW

7KLV SURJUDP LV QRW DFFHSWLQJ DSSOLFDWLRQV IRU D

%86 GRHV QRW PHHW WKH 07 UHTXLUHPHQW E\ LWVHOI LW PXVW EH SUHFHGHG
 ,QWHUPHGLDWH \$OJHEUD

6WXGHQWV DUH UHTXLUHG WR FRPSOHWH 0\$7+ RU LWV HTXLYDOHQW SULRU WR

7HUP XQLWV

6HVVLQRQ \$ ZHHNV		+&6)RXQGDWLRQV \$PHULFDQ 3OX *HQHUDO (GXFDWLRQ	
6HVVLQRQ % ZHHNV		%86 /HDGHUV 7HDPV DQG &KDQJH	

'RPLQLFDQ 8QLYHUVLW\ RI &DOLIRUQLD \$GXOW 'HJUHH &RPSOHWLRQ 3URJUDPV *HQHUDORIG DQG \$GPLVLV

7HUP XQLWV

6HVVLQR \$ ZHHNV	(1*/ &ULWLFDO ,QTXLU\ 5HIOHFWL \$GYDQFHG :ULWLQJ 5HVHDFK *HQH
6HVVLQR % ZHHNV	%86 3URIHVVLQRDO 3UHVHQFH &R %XVLQHVV 0DMRU DQG *HQHUDO (GXF

7HUP XQLWV

6HVVLQR \$ ZHHNV	(&21 01QRR&Uðu 0uQ '%y- -2Q '%y- -\•X'UQ %V..

\$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP
\$GPLQLVWUDWLRQ %\$ &RXUVH 'HVFL

%86 /HDGHUV 7HDPV DQG &KDQJH XQLWV
3DUWLFLSDQWV ZLOO H[DPLQH OHDGHUVKLS WHDP DQG RUJDQL]DWLRQDO FKDQJH
OHDGHUVKLS WUDLWV DQG EHKDYLRUV DFURVV VLWXDWLRQV DQG FXOWXUHV FRPS
SRZHU DQG HWKLFV LQ HIIHFWLYH OHDGHUVKLS EHKDYLRUV VWUDWHJLHV IRU LQV
RUJDQL]DWLRQDO YLVLRQ WHDP GHYHORSPhQW WKHRU\ DQG WHDP PHPEHU FKDU
WHDPV LQ SODQQLQJ DQG LPSOHPHQWDWLRQ KDUQHVVLRQJ FRQIOLFW DQG SURPRW
DQG H[DPLQH RUJDQL]DWLRQDO FKDQJH SURFHVVHV DQG SHRSOH V UHDFWLRQV WR
HIIHFV FRQWLQRRXV FKDQJH IRU EXVLQHVV DGYDQWDJH

%86 3URIHVVLQRQDO 3UHVHQFH &RPPXQLFDWLRQV IRU *OREDO %XVLQH
7KHRU\ DQG SUDFWLFH RI HIIHFWLYH RUDO DQG ZULWWHQ PDQDJHULDO DQG OHDG
6WXGHQWV DSSO\ FRPPXQLFDWLRQ VWUDWHJLHV DSSURSULDWH WR DXGLHQFH DQG
SODQ DQG VWUDWHJLFDQO\ PDS XWLOL]H VXSSRUW PDWHULDOV RUJDQL]H HIIHFV
6WXGHQWV ZLOO GHYHORS DQ XQGHUVWDQGLQJ RI WKH UROH RI JHQGHU UDFH FX
FRPPXQLFDWLRQV SDWWHUQV LQ SUHVHQWDWLRQ ZLWK DQG ZLWKRXW PHGLD GHV
SHUVXDVLV SUHVHQWDWLRQV SUDFWLFHQJ OLVWHQLQJ VNLOOV SHUIRUPHQJ IRU
DQG UHYLVLRQ

%86 0DUNHWLQJ ,QQRYDWLRQV LQ WKH *OREDO (FRQRP\ XQLWV
7KLV FRXUVH ZLOO VHUYH WR SURYLGH VWXGHQWV ZLWK DQ XQGHUVWDQGLQJ RI W
WKH JOREDO HFRQRP\ :H ZLOO EHJLQ E\ EUXVKLQJ XS RQ EDVLF WUDGLWLRQDO P
FKDQQHOV RI FRPPXQLFDWLRQ %UDQG 0DQDJHPHQW HWF 7KH QH[W VWHS ZLOO
RUGHU WR DFRPPRGDWH WKH QHGV RI PXOWLQDWLRQDO FRUSRUDWLRQV 01&V I
FRQVLGHUDWLRQV ZLOO EH WKH QHFHVVLW\ WR IRUPXODWH VWUDWHJLHV WKDW UH
FRQVLVWHQW EUDQG LPDJH JOREDOO\ DV ZHOO DV DFKLHYH DQ HFRQRP\ RI VFDOH
RI PDUNHWLQJ JXHULOOD PDUNHWLQJ YLUOD PDUNHWLQJ HWF ZLOO EH GLVFXV

%86 6WDWLWVLFV 5HVHDFK IRU %XVLQHVV XQLWV
7KLV FRXUVH LQWURGXFHV VWXGHQWV WR EDVLF UHVHDFK PHWKRGORJLHV XVHG
DSSURDFKHV WR GDWD DQDO\VLV ZLOO EH SDUW RI WKH FRXUVH PDWHULDO 7KH F
VFLHQWLILF UHVHDFK LQ WKH FRQWH[W RI PRGHUQ GD\ EXVLQHVV GHFLVLRQ PDN
LQWHUYLHZV HWF ZLOO WKHQ EH FRYHUHG 7KH ILQDO DQG PRVW VLJQLILFDQW S
VFLHQWLILF PHWKRG TXDQWLWDWLYH PHWKRGV VWDWLWVLFDO DQDO\VLV DQG KR
DQDO\VLV 6WXGHQWV ZLOO EH UHTXLUHG WR JDWKHU SULPDU\ GDWD DQG XVH VRI

%86 &RUSRUDWH 6RFLDO 5HVSQRVLELOLW\ /DZ (WKLFV XQLWV
7KLV FRXUVH ZLOO H[SORUH WKH LQWHUIDFH EHWZHHQ OHJDO UHTXLUHPHQWV JRY
6RFLDO 5HVSQRVLELOLW\ &65 :H ZLOO H[DPLQH WKH KLVWRU\ RI WKH LGHD RI &6
JHQHUDWLRQ RI OHJDO UHTXLUHPHQWV LPSRVLQJ TXDVL OHJDO UHTXLUHPHQWV RQ
VLPLODU JUHHQ FHUWLILFDWLRQV &DUERQ QHXWUDO VXSSO\ FKDLQ UHTXLUHPHQW
UHJXODWLRQ DQG 5HODWHG HPHUJLQJ UXOHV :H ZLOO DOVR H[SORUH LQGXVWU\ V
OHJDO UHTXLUHPHQWV ZLWKLQ WKH HOHFWURQLFV SKDUPDFHXWLFDO DQG DXWRF

%86 6XSSO\ &KDLQ 0DQDJHPHQW DQG ,7 XQLWV
2QH RI WKH JUHDWHVW FKDOOHQJHV IDFLQJ JOREDO FRPSDQLHV LV FUHDWLQJ G\Q
KLJK SHUIRUPDQFH ZLWKLQ DIUDPHZRUN RI FRUSRUDWH VRFLDO UHVSQRVLELOLW\
IRFXVHV RQ WKH UROH RI OHDGHUVKLS DQG ,7 LQ WKH FRUSRUDWH FRRUGLQDWLRQ

'RPLQLFDQ 8QLYHUVLW\ RI &DOLIRUQLD \$GXOW 'HJUHH &RPSOHWLRQ 3URJUDPV *HQHUDORIG DQG \$GPLVVL

GHFLVLRQ PDNLQJ WKURXJKRXW WKH QHWZRUN DV WKH\ VHHN WR V\QFKURQL]H SH
PDQXIDFWXULQJ VRXUFLQJ ZDUHKRXVLQJ DQG GLVWULEXWLRQ 7KH GHSOR\PHQW
DOLJQPHQW DQG UHVSQRVLYHQHV ZLWKLQ WKH VXSSO\ FKDLQ ZLOO EH H[DPLQHG

%86 \$FFRXQWLQJ IRU 0DQDJHUV &UHDWLQJ 9DOXH XQLWV
\$FFRXQWLQJ SURYLGHV LQIRUPDWLRQ WR LQWHUQDO DQG H[WHUQDO VWDNHKROGH
KRZ WR SUHSDUH DQG DQDO\]H ILQDQFLDO VWDWHPHQWV 6WXGHQWV ZLOO XVH DF
6WXG\ HWKLFDO VLWXDWLRQV FRUSRUDWH JRYHUQDQFH DQG RWKHU FXUUHQW LV

%86 3HUIRUPDQFH 0DQDJHPPHQW DQG 1HJRWLDWLRQV XQLWV
7KH FRXUVH ZLOO IRFXV RQ SHUIRUPDQFH PDQDJHPPHQW ZKLFK LV DQ HIIHFWLYH PH
FRXUVH ZLOO GHOYH LQWR QHJRWLDWLRQ VNLOOV LQ GLYHUVH FRQWH[VW 7RSLFV
PDQDJHPPHQW DSSUDLVDO LQVWUXPHQWV IHGDFN DQG FRDFKLQJ 6WXGHQWV ZL
QHJRWLDWLRQV DQG GHYHORS FRQIOLFW UHVROXWLRQ VNLOOV DQG VWUDWHJLHV

%86 ,PSDFW RI *OREDOL]DWLRQ LQ %XVLQHVV &URVV &XOWUDO 0DQD
7KH FRXUVH LV GHVLJQHG WR LQWURGXFH VWXGHQWV WR PDMRU WUHQGV LQ JORE
EXVLQHVV 7R EH VXFFHVVIXO ERWK LQGLYLGXDOV DQG LQVWLWXWLRQV QHHG WR
FRPPXQLFDWH VXFFHVVIXOO\ 7KLV FRXUVH ZLOO IRFXV RQ SRWHQWLDO LPSDFWV
DJUHHPPHQWV UROH RI LQWHUQDWLRQDO ILQDQFLDO LQVWLWXWLRQV DQG)', LPSD
HQYLURQPHQWDO LVVXH

%86)LQDQFLDO 0DQDJHPPHQW IRU %XVLQHVV 6XFFHVV XQLWV
7KLV FRXUVH SURYLGHV VRPH RI WKH PRVW LPSRUWDQW WRROV UHTXLUHG IRU LQY
DUH WKH WLPH YDOXH PRQH\ QDPHO\ WKH FRQYHUWLRQ RI IXWXUH VWUHDNV RI L
GHWHUPLQDWLRQ RI WKH SURILWDELOLW\ RI SRWHQWLDO LQYHVWPHQWV &\$30 WKH
LQFOXGHV WKH WUHDWPHQW RI ULVN WKH FRVW RI FDSLWDO DQG WKH 6HFXULW\
UHWXUQ DQG ULVN

%86 6XVWDLQDEOH 'HYHORSPPHQW 'ULYHU IRU ,QQRYDWLRQ XQLWV
7KH FRXUVH IRFXV LV WKH WUDQVIRUPDWLRQ RI VRFLDO DQG HQYLURQPHQWDO FK
DQG EXVLQHVV GHYHORSPPHQW 7KH FRXUVH ZLOO H[SORUH WKUHH NH\ GLPHQVLRQ
DQ HPSKDVLV RQ WKH UROH RI WKH FRUSRUDWH VHFWRU LQ WKH UHGXFWRQ RI SF
KHLJKWHQHG FRQFHUQV DERXW VRFLDO MXVWLPH LVVXH DQG FRUSRUDWH UHVSRO
ULVNV WR EH PLWLJDWHG DQG WKLUGO\ VXVWDLQDELOLW\ ZLWK DQ HPSKDVLV RQ
LQFUHDVH LQ WKH VXVWDLQDELOLW\ RI WKHLU VXSSO\ FKDLQV

%86 &RUSRUDWH DQG (QWUHSUHQHULDO 6WUDWHJLF 30DQQLQJ 6HQL
7KLV FDSVWRQH FRXUVH ZLOO LQWHJUDWH WKH IXQFWLRQDO NQRZOHGJH DFTXLUH
DFFRXQWLQJ ILQDQFH PDUNHWLQJ VWU P0`@0 P€kpÀcRXQLWLHV USRP•0€ð 0ĐŠ0€€

%86 P€p01`0`#P0 À``ð7KLV DD@ v7Y6VĐcu•`PðÀ€ P•`0°`À ©` € ||3ð Fa}a}Y6V Ó2•P YV

\$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP
%\$ ±)OH[

\$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP
(QJOLVK ZLWK D :ULWLQJ (PSKDVLV 0
0LQRUV

(QJOLVK FRXUVHV RIIHU DOO VWXGHQWV WKH RSSRUWXQLW\ WR H[SDQG WKHLU NQ

ODMRU (QJOLVK

7KURXJK WKH FULWLFDO UHDGLQJ RI D GLYHUVLW\ RI WH[WV²DQFLHQW WR FRQWHP
(QJOLVK PDMRUV IXUWKHU WKHLU XQGHUVWDQGLQJ DQG DSSUHFLDWLRQ RI WKH OL
GUDPD DQG FUHDWLYH QRQ ILFWLRQ DQG WKH\ OHDUQ WR LQFRUSRUDWH WKHLU
WKH ZRUNV WKH\ KDYH VWXGLHG

\$V 6HQLRUV XQGHU IDFXOW\ JXLGDQFH (QJOLVK PDMRUV XQGHUWDNH DQ H[WHQV
VXPPDULHV RI WKHLU WKHVHV DW DQ (QJOLVK 'HSDUWPHQW FHOHEUDWLRQ ZKLFK V

ODMRU (QJOLVK ZLWK D &UHDWLYH :ULWLQJ (PSKDVLV

,Q DGGLWLRQ WR WKH LQ GHSWK VWXG\ RI OLWHUDU\ WH[WV H[SHULHQFHG E\ DOO
(PSKDVLV WDNH FRXUVHV WDXJKW E\ VNLOOHG ZULWHUV DLPHG DW GHYHORSLQJ
GUDPD DQG QRQ ILFWLRQ

\$V 6HQLRUV XQGHU IDFXOW\ JXLGDQFH (QJOLVK ZLWK D &UHDWLYH :ULWLQJ (PSK
RU JHQUHV (DFK SRUWIROLR LQFOXGHV DQ LQWURGXFWRU\ HVVD\ ZKLFK GLVFXVVH
ZRUN 7KH VWXGHQW SUHVHQWV D VHOHFWLRQ IURP WKH SRUWIROLR DW WKH (QJ
HDFK VHPHVWHU

0LQRUV LQ (QJOLVK DQG (QJOLVK ZLWK D &UHDWLYH :ULW

0LQRUV LQ (QJOLVK DQG LQ &UHDWLYH :ULWLQJ ZLWK WKHLU HPSKDVLV RQ FDUHI
PDMRUV LQ DQ\ GLVFLSOLQH WKH\ SUHSDUH VWXGHQWV IRU IXUWKHU VWXG\ DQG I
HQYLURQPHQWDO VWXGLHV SXEOLF UHODWLRQV DQG ODZ

3URJUDP /HDUQLQJ 2XWFRPHV

6VWXGHQWV ZLOO GHPRQVWUDWH WKH DELOLW\ WR GR WKH IROORZLQJ
9HUEDO /LWHUDF\ WR ZULWH H[SRVLWRU\ HVVD\ V WKDW KDYH IRFXVHG WKHV
WKDW GUDZ XSRQ ERWK SULPDU\ DQG VHFRQGDU\ VRXUFHV DQG WKDW GRFXPH
/LWHUDU\)RUPV DQG &RQFHSWV WR LGHQWLI\ DQG DQDO\]H WKH OLWHUDU\
ILFWLRQ DQG SRHWU\ DQG WR UHFRJQL]H K\EULG IRUPV
+LVWRULFDO DQG &XOWXUDO &RQWH[WV WR PDNH FRQQHFWRQV EHWZHHQ D
KLVWRULFDO DQG FXOWXUDO FRQWH[WV H J PDMRU HYHQW GRFXPHQWV EH
GLYHUVH OLWHUDU\ FDQRQV
ODMRU LQ (QJOLVK XV DQG VXVWDLQ DQ DUJXPHQW UHODWLQJ WR OLWHUDU\
ERWK SULPDU\ DQG VHFRQGDU\ VRXUFHV DQG LQWHUUDWLQJ FULWLFDO DQ
ODMRU LQ (QJOLVK ZLWK D &UHDWLYH SUHSDUH VWXGHQWV IRU IXUWKHU VWXG\ DQG I
HQYLURQPHQWDO VWXGLHV SXEOLF UHODWLRQV DQG ODZ

\$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP 5HTXLUHPHQWV

8SSHU 'LYLVLRQ			
6HOHFW WZR RI WKH IROC			
(1*/		*HQUH	
(1*/		/LWHUDU\ &ULWLFLVP	
(1*/		%ULWLVK /LWHUDWXUH EHIRUH	
(1*/		%ULWLVK /LWHUDWXUH EHWZHHQ	
(1*/		6KDNHVSHDUH	
(1*/		8QLWHG 6WDWHV /LWHUDWXUH EHIRUH	
(1*/		8QLWHG 6WDWHV /LWHUDWXUH DIWHU	
(1*/		:RUOG /LWHUDWXUH :HVWHUQ &ODVVL	
(1*/		:RUOG /LWHUDWXUH	
(1*/		(WKQLF /LWHUDWXUH	
(1*/		6HQLRU 7KHVLV	
(1*/		,QWHUQVKLS	
(OHFWLYHV			
(LWKHU XQLWV		/LWHUDWXUH	
RU XQLWV		/LWHUDWXUH &RXUVHV	
DQG XQLWV		:ULWLQJ &RXUVH	
7RWDO (QJOLVK ODMRU %			XQLW

'\$OWHUQDWLYH FRXUVH V PD\ EH VHOHFWHG LQ FRQVXOWDWLRQ ZLWK 'HSDUWPHQ

\$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP
&UHDWLYH :ULWLQJ 0LQRUV 5HTXLUH

QRGVE LWLQ3YQ7 \ WHDE DLSU @DP`\$GXOW 'HJUHH & SOHWLQQ 3URJULQ (QJOLV8 PL

(1*/ %ULWLVK /LWHUDWXUH ,, XQLWV
0DMRU ZRUNV DQG PRYHPHQWV RI (QJOLVK OLWHUDWXUH IURP WKH 5RPDQWLF 3HU
:RUGVZRUK 7HQQ\VRQ %URZQLQJ 'LFNHQV +DUG\

(1*/ %ULWLVK /LWHUDWXUH ,,, XQLWV
0DMRU ZRUNV DQG PRYHPHQWV RI (QJOLVK OLWHUDWXUH IURP WKH EHJLQQLQJ RI :
:RROI \$XGHQ <HDWV

(1*/ 8QLWHG 6WDWHV /LWHUDWXUH XQLWV
0DMRU ZRUNV DQG OLWHUDU\ PRYHPHQWV RI WKH 8QLWHG 6WDWHV IURP LWV EHJLQ
PHQ DQG ZRPHQ RI GLYHUVH EDFNJURXQGV

(1*/ 8QLWHG 6WDWHV /LWHUDWXUH XQLWV
0DMRU ZRUNV DQG OLWHUDU\ PRYHPHQWV RI WKH 8QLWHG 6WDWHV IURP WR WK
DQG SURVH ZULWWHQ E\ PHQ DQG ZRPHQ IURP D GLYHUVLW\ RI HWKQLF EDFNJURXQ

(1*/ /LWHUDWXUH *RHV WR WKH ORYLHV XQLW
7KLV FRXUVH FDSWXUH OLWHUDU\ DQG FLQHPDWLF QDUUDWLYHV ,Q YLHZLQJ ERW
VWXGHQWV GLVFHUQ WKH VLPLODULWLHV EHWZHHQ WH[WXDO DQG YLVXDO VWRU\W
DQG KRZ ILOP KDV VKDSHG OLWHUDWXUH LV H[SORUHG &RXUVH UHTXLUHPHQWV LG
DQDO\WLFDO HVVD\

(1*/ :RUOG /LWHUDWXUH :HVWHUQ &ODVVLFV XQLWV
6WXG\ RI PDMRU ZRUNV RI :HVWHUQ OLWHUDWXUH IURP WKH WLPH RI LWV EHJLQQL
FRPSRVHG RU ZULWWHQ LQ ODQJXDJHV RWKHU WKDQ (QJOLVK VXFK DV WKH 2OG D
9LUJLO\ \$HQH LG 'DQWH\ 'LYLQH &RPHG\ 6HOHFWHG ZRUNV PD\ YDU\ IURP VPH

(1*/ :RUOG /LWHUDWXUH /DWLQ \$PHULFDQ XQLWV
6WXG\ RI PDMRU ZRUNV DQG PRYHPHQWV RI /DWLQ DUWV 7KH PDWHULDOV IRU WKL
JHRJUDSKLFDU UHJLRQV RI /DWLQ \$PHULFD DQG DUH IRFXVHG RQ VSHFLILF OLWHUD
VW FHQWXU\ SRVWPRGHUQLVP WKH\ FRYHU D ZLGH VSHFWUXP RI SURVH SRHWU\
UHJLRQDO GLIIHUHQFHV :RUNV DQG ZULWHUV PD\ LQFOXGH ³RSRO 9XK ³4XHW]DO
3D]

(1*/ :RUOG /LWHUDWXUH \$VLDQ XQLWV
,QWURGXFWLRQ WR WKH OLWHUDWXUH RI RQH RU PRUH \$VLDQ OLWHUDWXUHV WUD
7RSLFV PD\ LQFOXGH KDLNX ZRPHQ\ OLWHUDU\ KLVWRU\ RI -DSDQ %XGGKLVV DO
WKH ERPE DYDQW JDUGH OLWHUDWXUH DQG 1RK SOD\ \$XWKRUV VWXGLHG PD\ L
.HQDEXUR /L 3R 7X)X /L &KLQJ &KDR DQG ,NN\X

(1*/ :RUOG /LWHUDWXUH &DQDGLDQ XQLWV
6WXG\ RI &DQDGLDQ OLWHUDWXUH DV D QDWLRQDO OLWHUDWXUH RQ DQ LQWHUQDV
TXHVWLRQ ³:KDW LV LQWULQVLFDOO\ DQG GLVWLQFWLYHO\ &DQDGLDQ DERXW &DQ
WKH FRXUVH DOVR ORRN DW &DQDGLDQ 4XHEHF ZRUNV LQ WUDQVODWLRQ DV ZH

JWV D YJUEOG\ RI

(1*/ /LWHUDU\ 7RSLF 0DMRU :RUNV LQ 7UDQVODWLRQ XQLWV
6HOHFWHG UHGDLQJV IURP ZULWHUV DFURVV WKH JOREH YLHZHG WKURXJK WKH O
WKH RULJLQDO ODQJXDJH LQ SDUDOOHO WH[W IRUPDW

(1*/ /LWHUDU\ 7RSLF 0RGHUQ 6SDQLVK /LWHUDWXUH XQLWV
7KH WK FHQWXU\ FRQVWLWXWHV D VHFRQG JROGHQ DJH LQ WKH KLVWRU\ RI 6SDQ
UHDG YLHZ GLVFXVV DQG ZULWH DQDO\VHV RI VHOHFWHG ZRUNV E\ PDMRU ZULWH
&LYLO :DU GLFWDWRUVKLS DQG GHPRFUDF\ SHULRGV :RUNV DUH LQ

(1*/ \$GYDQFHG /LWHUDU\ 7RSLF \$PHULFDQ 7UDQVFHQGHQWDOLVP XQ
([DPLQHV WKH HYROXWLRQ RI \$PHULFDQ 7UDQVFHQGHQWDOLVP IURP LWV (PHUVRQ
3RHWV (PHUVRQ :KLWPDQ 'LFNHQVRQ DQG 7KRUDX ZLOO EH UHDG DORQJVLGH S
3DUWLFXODU DWWHQWLRQ JLYHQ WR WKHRULHV RI QDWXUH VSLULWXDOLW\ VHOI

(1*/ *HQQHU 6XEFXOWXUHV XQLWV
([SORUHV WKH VRFLRORJLFDO LPSOLFDWLRQV RI WKH YDULHW\ RI OLIHVW\OHV LQ V
JD\ OHVELDQV WUDQVJHQGHUV GUXJV SURVWLWXWLRQ FRPPXQDO JDQJV VLQJO

(1*/ 3ROLWLFV RI WKH %RG\ LQ 0RWLRQ XQLWV
7KLV FRXUVH LV DQ LQWURGXFWRQ WR WKH ILHOG RI SHUIRUPDQFH VWXGLHV LQ
DHWKHWLFV²DUH UHDG DQG SROLWLFJHG 6HOHFW WRSLFV LQ GDQFH KLVWRU\ LQ
VWXG\ LVVXHV RI SRZHU YLVLELQW\ DQG UHSUHVHQDWLRQ ERWK RQ DQG RII V
HPERGLHG NQRZOHGJH UHIOHFWV DQG FUHDWHV FXOWXUDO YDOXHV DQG LGHQWLW
FUHDWHG LW DQG DV DQ LQVWLJDWRU RI FXOWXUDO FKDQJH

(1*/ 3ODFH ,GHQWLW\ XQLWV
\$Q H[DPLQDWLRQ RI WKHRULHV DQG QDUUDWLYHV RI SODFH DQG LGHQWLW\ IURP L
WKH FRXUVH LQFOXGH +RZ GRHV SODFH LQIOXHQFH LQGLYLGXDO DQG JURXS LGHQ
FUHDWH DQG LQKDELW" :KDW GRHV LW PHDQ WR 'EHORQJ' WR D SODFH" :KDW DUH
SODFH" +RZ GR ZH WHOO RXU VWRULHV RI SODFH DQG LGHQWLW\ " 6XFK TXHVWLRQV
DQG JHRJUDSKLFDO WKHRU\ SKLORVRSK\ OLWHUDWXUH DQG DUW DQG ZLOO LQYR
DQG PRUH

(1*/ \$GYDQFHG :ULWLQJ DQG 5HVHDFK XQLWV
)XUWKHU GHYHORSHPHQW RI FRPSHWHQFLHV LQ FULWLFDO WKLQNLQJ H[SRVLWRU\ Z
LGHQWLW\ LQJ VXPPDUL]LQJ HYDOXDWLQJ DQG LQWHJUDWLQJ LQIRUPDWLRQ 6WXG
IXOILQO WKH VHFRQG *HQHUDO (GXFDWLRQ UHTXLUHPHQW LQ ZULWLQJ 3UHUHTXLV
KLJKHU 3OHVH DOVR VHH (QJOLVK 3ODFHPHQW 3ROLF\ RI WKLV FDWDORJ

(1*/ *HQUH)LOP XQLWV
)RUPDO VWXG\ RI WKH JHQUH RI ILOP ZLWK DQDO\VLV RI LWV OLWHUDU\ HOHPHQW
HOHFWHG ILOPPDNHUV DQG IRUPV IURP WKH WK FHQWXU\ WR WRGD\

(1*/ *HQUH 3RHWU\ XQLWV
)RUPDO VWXG\ RI WKH JHQUH RI SRHWU\ ZLWK DQDO\VLV RI LWV OLWHUDU\ HOHPH
DQG IRUPV WKURXJK FRQWHPSRUDU\ WLPHV

\$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP DQG &XOWXUDO 6WXGLHV %\$

7KH +XPDQLWLHV DQG &XOWXUDO 6WXGLHV PDMRU RIIHUV VWXGHQWV WKH RSSRUW
H[DPLQLQJ WKH YDOXHV V\ VWHPV DQG SURGXFWLRQV RI D YDULHW\ RI FXOWXUHV
TXHVWLRQV WKDW KDYH VKDSHG YDULRXV FXOWXUHV ZLWKLQ WKH JOREDO KXPDQ
GLIIHUHQFH DV DV D UHVRXUFH IRU FKDOOHQJLQJ DQG FKDQJLQJ GRPLQDWH ZRUOG
LQWHUGLVFLSOLQDU\ FRXUVHZRUN LQ D SURJUDP WKDW EULQJV WRJHWKHU DUW KL
VRFLR FXOWXUDO HWKQLF VWXGLHV ,Q RUGHU WR JDLQ GHSWK LQ D SDUWLFXODU

7KH KDOOPDUNV RI D VWXGHQW FRPSOHWLQJ WKLV PDMRU DUH FRPSHWHQFH LQ F
VNLOOV LQ ZULWWHQ DQG VSRNHQ GLVFRXUVH KHLJKWHQH VHOI NQRZOHGJH GH
DUH ZHOOp €b7PÐ 0†Qz WKL VHEP Op €0

PRUDMRYH RI OG "7PÐ ÔQgÙ •dQg KDODUNV DQp °pWKQ i RIH FRLQ0U DLF S DUWGV
gŰ ✕Rg

+&6

1DWLYH \$PHULFDQ 3HUVSHFWLYHV

XQLWV

+&6 7HDFKLQJ \$VVLVWDQW XQLWV
7KH SULYLOHJH RI VHUYLQJ DV D WHDFKLQJ DVVLVWDQW LV DYDLODEOH WR VWXGH
&KDLU WKH LQVWUXFWRU FRQFHUQHG DQG WKH 'HDQ RI WKH 6FKRRO \$ FRQWUDF
VSHFLILFV RQ SURMHFW FRQWHQWV PDWHULDOV DQG HYDOXDWLRQ SURFHVV ZLOO
XQLWV

+&6 ,QWHUQVKLS &DUHHU ([SORUDWLRQ +XPDQLWLHV &XOWXUDO 6WX
6WXGHQWV JDLQ SUDFWLFDO KDQGV RQ WUDLQLQJ LQ WKHLU SDUWLFXODU DUHD F
WKHLU FKRRVLQJ LQ FRQVXOWDWLRQ ZLWK WKHLU DFDGHPLF DGYLVRU DQG WKH &
DGYLVRU VWXGHQWV PHHW ZLWK WKH &DUHHU DQG ,QWHUQVKLS RIILFH WR ILOO R
~~QTFM VQ DE \ 2TVQD WXZHFRV XE PLW DQ DGG GURS IRUP DORQJ ZLWK WKH LQWHUQVKLS~~

+ , 67 OH[LFR \$]WHFV WR 3UHVHQQ XQLWV
6XUYHIV WKH KLVWRU\ RI OH[LFR IURP WKH HDUOLHVW KXPDP LQKDELWDWLRQ WR V
VHWWOHPHQW WKH OH[LFDQ 5HYROXWLRQ RI WKH WK FHQWXU\ OH[LFR 8 6 UHOD

~~6XUYHIV WOG~~

J p_iP₀p°PEVPδ€`XPRDUE`X]°€0PδÅδ00 p"p

~~6XUYHIV WOG~~

U À „δ U °0€°À` 0•P 0 €•p0€°T°€Ä° "€°T°ep` @dÀ€0δ 0-6 H[L S

d€°À` H5•pδ€ ,5•W @Q H[

~~6XUYHIV WOG~~

IUHHGRP DQG QHFHVVLW\ VSDFH DQG WLPH KXPDP GHVWLQ\ (DVW DQG :HVW SUR
WKH QDWXUH RI UHOLJLRXV IDLWK WKH SUREOHP RI FRQIOLFWLQJ WUXWK FODLPV

3+ ,/ 6HOI &RPPXQLW\ 6HUYLEFH XQLWV
([SORUDWLRQ RI FRQWHPSRUDU\ PRUDO SKLORVRSK\ GLUHFWHG DW WKH H[LVWHQW
UHODWLRQ WR WKH 'RWKHU' LQ D SOXUDOLVW VRFLHW\ &ULWLFDO DQDO\VLV RI W
UHIOHFWLRQ RQ ORFDO FRPPXQLW\ VHUYLEFH WKDW DOORZV IRU DFWLYH FXOWLYDW
WKDW WKHUH LV D KRXU FRPPXQLW\ EDVHG FRPSRQHQW WR WKH FODVV 7KH\ ZL
HVWDEOLVKHG FRPPXQLW\ SDUWQHUV RSSRUWXQLWLHV 7KH SURIHVVURU ZLOO DOVR
DFWLYLWLHV LQ WKHLU RZQ FRPPXQLW\ LI WKH\ UHVLGH RXWVLGH RI ODULQ &RXQW

32/ 2/ 3ROLWLFV DQG)LOP 3RZHU 3HUVXDVLQ XQLWV
7KH SKUDVH /LJKWV &DPHUD \$FWLRQ LV QRUPDOO\ DVVRFLDWHG ZLWK +ROO\ZR
WKHLU LGHDV DERXW SROLWLFDO DQG WKH SROLWLFDO V\WHP IURP PRYLHV :K
WHOO XV DERXW WKH SROLWLFDO V\WHP DQG WKH ZD\ SROLWLFDO DFWRUV EHKDY
SROLWLFV DQG SROLWLFDO DFWRUV H[HUFLVH SRZHU LQ GLIIHUEHQW ZD\V 7KLV FR
ZLWK WKH UHODWLRQV ILOPV KDYH RQ FXOWXUH LGHDV EHOLHIV DQG SHUFHS
UHYLHZ DQG DQDO\]H ILOPV DQG H[SORUH WKH ZD\ SROLWLFDO WKHRULHV DQG FRQ

5/*1 7KH 5KHWRULF RI %HOLHI XQLWV
\$Q LQYHVWLJDWLRQ RI *RG ODQJXDJH LQ WKH VSHHFKHV DQG ZULWLQJV RI RXWVW
UHOLJLRXV DFWLYLWV IURP DURXQG WKH ZRUOG WKLV +RQRUV VHPLQDU DLPV DV
FDSDFLW\ IRU FULWLFDO DQDO\VLV DQG XQGHUVWDQGLQJ WKH FRPSOH[UHODWLRQ

5/*1 :RPHQ 5HOLJLRQ DQG 6H[XDOLW\ XQLWV
\$ FURVV FXOWXUDO VWXG\ RI WKH LPSDFW RI WUDGLWLRQDO UHOLJLRXV WHDFKLQJ
DQG RQ ZRPHQ\ V RZQ VHOI SHUFHSWLRQ ZLWK SDUWLFXODU DWWHQWLRQ WR WKH

5/*1 7KHRORJ\ RI :RPHQ XQLWV
+RZ GRHV D ZRPDQ HYROYH D SHUVRQDO VSLULWXDOLW\ EH\RQG PDOH LPDJHV DQG
UHOLJLRQV DQG RI WKH ZRPDQLVW UHYROXWLRQ LQ WKHRORJ\ ZLOO OHDG WKLV H[
VDFUHG

5/*1 7KH 6SLULWXDOLW\ RI WKH (DUWK XQLWV
\$ VXVWDLQHGH UHIOHFWLRQ RQ WKH UROH RI UHOLJLRQ LQ WKH WDVN RI GHYHORS
GHJUHH WR ZKLFK WKDW UHODWLRQV VXJJHVW QHZ SRVVLELOLWLHV IRU WKH

5/*1 0\WK 6\PERO DQG 5LWXDO XQLWV
7KH SKHQRPHQ RQ RI UHOLJLRQ YLHZHG DQWKURSRORJLFDOO\ 5HOLJLRXV EHOLHIV
DQWKURSRORJLFDO WKHRULHV FRQFHUQLQJ WKH HYROXWLRQ DQG IXQFWLRQ RI UH
FXOWXUH DQG VRFLDO RUJDQL]DWLRQ

:*6 *HQGHU 5HODWLRQV XQLWV
,QWHUGLVFLSOLQDU\ DQG JOREDO DSSURDFK WR WKH GHYHORSPHQW RI ELRORJ\ D
WKHRU\ VRFLR FXOWXUDO DQWKURSRORJ\ DQG SV\FKRORJ\ ([DPLQHV WKH IXQGDF
VDSLHQV DQG OLIH SDWWHUQV VSHFLILF WR WKRVH FKDQJHV DQG WKH JHQGHU FRQ
DQFLHQW ZRUOGV GHYHORSHG YDULRXV LQVWLWXWLRQV DQG SHUVSHFWLYHV RQ J

:*6 7R[LF %RGLHV XQLWV
\$FFRUGLQJ WR UHFHQW VWXGLHV RXU ERGLHV KDYH EHFRPH UHSRVLWRULHV IRU G
SKWKDODWHV 2XU VWXG\ EHJLQV E\ VHWWLQJ D KLVWRULFDO FRQWH[W WR XQGHU
FRPPHUFH DQG RI UHJXODWRU\ DJHQFLHV :H H[DPLQH WKH HIIHFW RXU OLIHVW\OH
ORRN FULWLFDOO\ DW KRZ JHQGHU UDFH DQG FODVV IRUHJURXQG TXHVWLRQV RI H

'RPLQLFDQ 8QLYHUVLW\ RI &DOLIRUQLD \$GXOW 'HJUHH &RPSOHWLRQ 3URJUDPV *HQHUDORJ DQG \$GPLVVL

:*6

7KH 0DVFXOLQLW\ 0DWUL[XQLWV

:KR DUH WKHVH JX\V" 7KLV FRXUVH DLPV WR DQVZHU WKDW TXHVWLRQ WKURXJK DG
PDVFXOLQLWLHV WKH VFLHQFHV WKH WKHRULHV DQG WKH VXE FXOWXUHV ± ZLV
WKH OLNH ± WKDW FRQVWUXFW FRQWHP SRUDU\ PDVFXOLQLWLHV LQ 8QLWHG 6WDW
DQDO\]H WKH LQWHUVHFWRQV EHWZHHQ PDVFXOLQH LGHQWLW\ DQG UDFH HWKQL
VRFLDO FXOWXUDO LVVXHV 1R KXJJLQJ RU WDONLQJ DERXW IHHOLQJV

:*6

3ULQFLSOHV RI *HQGHU 6WXGLHV XQLWV

\$ JHQHUDO LQWURGXFWRQ WR WKH VWXG\ RI ZRPHQ DQG JHQGHU DFURVV GLVFLS
JHQGHU UROHV DQG VH[XDOLW\ DUH H[SORUHG DQG HQJDJHG ZLWK DQG EHWZHHQ
KLVWRU\ SV\FKRORJ\ OLWHUDWXUH (QJOLVK IHPLQLVW VWXGLHV DQG ILOP VWXG

7UDFN \$GPLVVLRQ

6WXGHQWV ZLVKLQJ WR GHFODUH 7UDFN WKH DFFHOHUDWHG SDWK WR D ODVW
WKH 0\$ +XPDQLWLHV SURJUDP DIWHU HDUQLQJ XQLWV RI XSSHU GLYLVLRQ FRXUV
'RPLQLFDQ IRU *HQHUDO (GXFDWLRQ FUHGLW FRXQW WRZDUG WKLW XQLW WRWDO

\$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP
,QWHUFXOWXUDO 6WXGLHV %\$ &RXU

/&6 /LWHUDU\ &ULWLFLVP XQLWV
6XUYH\ RI GHYHORSHPHQWV LQ \$QJOR \$PHULFDQ OLWHUDU\ FULWLFLVP RI WKH WK
1HZ &ULWLFLVP 3V\FKRDQDO\WLF ODU[LWV)HPLQLVW 5HDGHU 5HVSRQVH 6WUXF
LQWURGXFHV ERWK WKHRUHWLFDO DQG SUDFWLFDO FULWLFLVP

/&6 3RVWFRORQLDOLVP XQLWV
6WXG\ RI OLWHUDWXUH SURGXFHG E\ FXOWXUHV WKDW GHYHORSHG LQ UHVSRQVH V
FRORQLDOLVW DQG DQWL FRORQLDOLVW LGHRORJLHV \$OVR VWXG\ RI SRVWFRORQ
&RHWJHH &RQUDG 'HIRH *RUGLPHU .LQFDLG .LSOLQJ 1DLSDXO 5K\ 5XVKGLH

/&6 :HVWHUQ &ODVVLV XQLWV
6WXG\ RI PDMRU ZRUNV RI :HVWHUQ OLWHUDWXUH IURP WKH WLPH RI LWV EHLQQL
FRPSRVHG RU ZULWWHQ LQ ODQJXDJHV RWKHU WKDQ (QJOLVK VXFK DV WKH 2OG D
9LUJLO V \$HQHLG 'DQWH V 'LYLQH &RPHG\ 6HOHFWHG ZRUNV PD\ YDU\ IURP VHPHV

/&6 /DWLQ \$PHULFDQ /LWHUDWXUH XQLWV
6WXG\ RI PDMRU ZRUNV DQG PRYHPHQWV RI /DWLQ DUWV 7KH PDWHULDOV IRU WKL
JHRJUDSKLFDQ UHJLRQV RI /DWLQ \$PHULFDQ DQG DUH IRFXVHG RQ VSHFLILF OLWHUD
VW FHQWXU\ SRVWPRGHUQLVP WKH\ FRYHU D ZLGH VSHFWUXP RI SURVH SRHWU\
UHJLRQDO GLIIHUHQFHV :RUNV DQG ZULWHUV PD\ LQFOXGH 3RSRO 9XK 4XHW]DQ
3D]

/&6 \$VLDQ /LWHUDWXUH XQLWV
,QWURGXFWRQ WR WKH OLWHUDWXUH RI RQH RU PRUH \$VLDQ OLWHUDWXUHV WUD
7RSLFV PD\ LQFOXGH KDLNX ZRPHQ V OLWHUDU\ KLVWRU\ RI -DSDQ %XGGKLVP DG

/&5 P\L S

0 TX \p H

/&6

\$IULFDQ \$PHULFDQ /LWHUDWXUH

XQLWV

ZLGHVSUHDG SRSXODULW\ 0D 5DLQH\ %HVVLH 6PLWK DQG %LOOLH +ROLD\ FDUUL
PDLQVWUHPD ZKLOH DOVR FUHDWLQJ RSSRUWXQLW\ IRU IHPDOHV DV SURIHVVLRQD
SDUWLFXODUO\ E\ WKH HDUO\ IHPDOHV EOXHV VLQJHUV SURYL\$PHULFDQ\ QRE RBU GLO
OLWHUDWXUH DUWKHD%GXSRD\W HFWKRV ILQGV LWVHOI H[SURHGLD%OZULWV R
PRYHPHQWV

086 (DUO\ \$PHULFDQ :RPHQ 7KURXJK 6RQJ XQLWV
7KH ZHDOWK RI \$PHULFDQ VRQJ OLWHUDWXUH IURP ERWK IRON DQG DUW WUDGLW
H[SORUHV WKH UHSUHVHQDWLRQ RI WKH QHZ PRUH LQGHSHQGHQW ZRPDQ DV VHI
FHQWXULHV 7KHVH VRQJV SURYLGH D UHYHDOLQJ YLHZ RI WKH WLPHV VWUXJJOHV

086 :RUOG 0XVLF XQLWV
7KLV FRXUVH ZLOO H[SORUH D YDULHW\ RI ROG DQG WUDGLWLRQDO PXVLFDO VW\O
ERWK DQ RYHUYLHZ RI HWKQLF VW\OHV ZRUOGZLGH DQG LQVLJKWV LQWR VHOHFWH
LQ FODVV OHFWXUHV GLVFXVLRQ GHPRQVWUDWLRQV DQG SHUIRUPDQFHV \$XGL
OLYH SHUIRUPDQFHV ZLOO EH XVHG WR LOOXVWUDWH WKH YDULRXV PXVLFDO VW\O

3+,/ 3KLORVRSK\ RI +XPDQ 1DWXUH XQLWV
,QTXLU\ LQWR WKH HQGXULQJ TXHVWLRQV RI KXPDQ QDWXUH LQFOXGLQJ WKH PHDO
RULJLQ DQG GHVWLQ\ LWV FDSDFLWLHV IRU JRRG DQG HYLO WKH VFRSH DQG OLP
LPPRUWDOLW\ GUDZLQJ XSRQ D UDQJH RI :HVWHUQ WKRXJKW 3DUWLFXODU DWWH
SKLORVRSKLFDO YLHZV DQG WKRVH VWHPPLQJ IURP PRGHUQ KXPDQ VFLHQFHV VXF

3+,/ \$QFLHQW *UHHN 3KLORVRSK\ XQLWV
6WXG\ RI WKH VHPLQDO LGHDV RI 6RFUDWHV 3ODWR DQG \$ULVWRWOH UHJDUGLQJ
EHLQJV 6RFU DWLF SKLORVRSKLFDO WKRXJKW DQG WKH YLHZV RI WKH 6WRLFV DQG

3+,/ 3KLORVRSK\ RI 5HOLJLRQ XQLWV
\$ ULJRURXV LQTXLU\ LQWR WRSLFV FHQWUDO WR WKH SKLORVRSK\ RI UHOLJLRQ LQ
IUHHGRP DQG QHFHVVLW\ VSDFH DQG WLPH KXPDQ GHVWLQ\ (DVW DQG :HVW SUR
WKH QDWXUH RI UHOLJLRXV IDLWK WKH SUREOHP RI FRQIOLFWLQJ WUXWK FODLPV

3+,/ 6HOI &RPPXQLW\ 6HUylFH XQLWV
([SORUDWLRQ RI FRQWHPSRUDU\ PRUDO SKLORVRSK\ KRBBFDW\KHO WIKFLW\LVSMHGM
UHODWLRQ WR WKH 'RWKHU' LQ D SOXUDOLVW VRFLHW\ &ULWLFDO DQDO\VLV RI W
UHIOHFWLRQ RQ ORFDO FRPPXQLW\ VHUylFH WKDW DOORZV IRU DFWLYH FXOWLYDV
WKDW WKHUH LV D KRXWGFRRPSRQWQW WR WKH FODVV 7KH\ ZLOO KDYH WKH RSS
HVWDEOLVKHG FRPPXQLW\ SDUWQHUV RSSRUWXQLWLHV 7KH SURIHVVURU ZLOO DOVR
DFWLYLWLHV LQ WKHLU RZQ FRPPXQLW\ LI WKH\ UHVLGH RXWVLGH RI 0DULQ &RXQW

32/ 2/ 3ROLWLFV DQG)LOP 3RZHU 3HUVXDVLQJ XQLWV
7KH SKUDVH /LJKWV &DPHUD \$FWLRQ LV QRUPDOO\ DVVRFLDWHG ZLWK +ROO\ZRF
WKHLU LGHDV DERXW SROLWLFDOV DQG WKH SROLWLFDO V\WHP IURP PLYLHV :K
WHOO XV DERXW WKH SROLWLFDO V\WHP DQG WKH ZD\ SROLWLFDO DFWRUV EHKDY
SROLWLFV DQG SROLWLFDO DFWRUV H[HUFLVH SRZHULQ GLIIHUHQW ZD\V 7KLV FR
ZLWK WKH UHODWLRQV ILOPV KDYH RQ FXOWXUH LGHDV EHOLHIV DQG SHUFHS
UHYLHZ DQG DQDO\]H ILOPV DQG H[SORUH WKH ZD\ SROLWLFDO WKHRULHV DQG FRO

5/*1 7KH 5KHWRULF RI %HOLHI XQLWV
\$Q LQYHVWLJDWLRQ RI RQ WKH VSHHFKHV DQG ZULWLQJV RI RXWVWDQGLQJ SROL
UHOLJLRXV DFWLYLWV IURP DURXQG WKH ZRUOG WKLV +RQRUV VHPLQDU DLPV DV
FDSDFLW\ IRU FULWLFDO DQDO\VLV DQG XQGHVWDQGLQJ WKH FRPSOH[UHODWLR

5/*1 :RPHQ 5HOLJLRQ DQG 6H[XDOLW\ XQLWV
\$ FURVV FXOWXUDO VWXG\ RI WKH LPSDFW RI WUDGLWLRQDO UHOLJLRXV WHDFKLD
DQG RQ ZRPHQ\SRZQHVWLRQ ZLWK SDUWLFXODU DWWHQWLRQ WR WKH KLVWRULFD

5/*1 7KHRORJ\ RI :RPHQ XQLWV
+RZ GRHV D ZRPDQ HYROYH D SHUVRQDO VSLULWXDOLW\ EH\RQG PDOH LPDJHV DQG
UHOLJLRQV DQG RI WKH ZRPDQLVW UHYROXWLRQ LQ WKHRORJ\ ZLOO OHDG WKLV H
VDFUHG

5/*1 7KH 6SLULWXDOLW\ RI WKH (DUWK XQLWV
\$ VXVWDLQHG UHIOHFWLRQ RQ WKH UROH RI UHOLJLRQ LQ WKH WDVN RI GHYHORS
GHJUHH WR ZKLFK WKDW UHODWLRQV KLS VXJJHVWV QHZ SRVVLELOLWLHV IRU WKH

5/*1 0\WK 6\PERO DQG 5LWXDO XQLWV
7KH SKHQRPHQRRQ RI UHOLJLRQ YLHZHG DQWKURSRORJLFDODWUHQHOLFXOWXEHUOLH
DQWKURSRORJLFDQ WKHRULHV FRQFHUQLQJ WKH HYROXWLRQ DQG IXQFWLRQ RI UH
FXOWXUH DQG VRFLDO RUJDQL]DWLRQ

:*6 *HQQGHU 5HODWLRQV XQLWV
,QWHUGLVFLSOLQDU\ DQG JOREDO DSSURDFK WR WKH GHYHORSPHQW RI ELRORJ\ D
WKHRU\ VRFLR FXOWXUDO DQWKURSRORJ\ DQG SV\FKRORJ\ ([DPLQH WKH IXQGDF
VDSLHQV DQG OLIH SDWWHUQV VSHFLILF WR WKRVH FKDQJHV DQG WKH JHQQHU FR
DQFLHQW ZRUOG GHYHORSHG YDULRXV LQVWLWXWLRQV DQG SHUVSHFWLYHV RQ JH

:*6 7R[LF %RGLHV XQLWV
\$FFRUGLQJ WR UHFHQW VWXGLHV RXU ERGLHV KDYH EHFRPH UHSRVLWRULHV IRU G
SKWKDODWHV 2XU VWXG\ EHJLQV E\ VHWWLQJ D KLVWRULFDQ FRQWH[W WR XQGH
FRPPHUFH DQG RI UHJXODWRU\ DJHQFLHV :H H[DPLQH WKH HIIHFWRV RXU OLIHVW\OH
ORRN FULWLFDOO\ DW KRZ JHQQHU UDFH DQG FODVV IRUHJURXQG TXHVWLRQV RI H

:*6 7KH 0DVFXOLQLW\ 0DWUL[XQLWV
:KR DUH WKHVH JX\V" 7KLV FRXUVH DLPV WR DQVZHU WKDW TXHVWLRQ WKURXJK DG
PDVFXOLQLWLHV WKH VFLHQFHV WKH WKHRULHV DQG WKH VXE FXOWXUHV ± ZLW
WKH OLNH ± WKDW FRQVWUXFW FRQWHPSRUDU\ PDVFXOLQLWLHV LQ 8QLWHG 6WDW
DQDO\]H WKH LQWHUWHFWLRQV EHWZHHQ PDVFXOLQH LGHQWLW\ DQG UDFH HWKQL
VRFLDO FXOWXUDO LVVXHV 1R KXJJLQJ RU WDONLQJ DERXW IHHOLQJV

:*6 3ULQFLSOHV RI *HQQGHU 6WXGLHV XQLWV
\$ JHQHUDO LQWURGXFWRQ WR WKH VWXG\ RI ZRPHQ DQG JHQQHU DFURVV GLVFLS
JHQQHU UROHV DQG VH[XDODQFH H€ V@Q" `0À`ðð DQ €0p€P

36<	7KHRULHV RI 3HUVRQDOLW\ +LVWRU\ DQG	
36<	7KHRULHV RI 3HUVRQDOLW\ +LVWRU\ DQG	
36<	-XQLRU 6HPLQDU	
36<	6WDWLWVWLFV IRU WKH +HDOWK DQG %HKDY	
36<	5HVHDFK 0HWKRGV	
36<)LHOG 3ODFHPHQW WKLW FRXUVH PD\ EH UHSHDWHG IRU DQ D	
36<	'LUHFWHG 5HVHDFK ,	
36<	'LUHFWHG 5HVHDFK , ,	
7RWDO 8SSHU 'LYLVLF		XQLW
7RWDO 3V\FKRORJ\ 0D %\$²\$'&3		XQLW

*URXS		
36< ;;;	6SHFLDO 7RSLFV LQ 3V\FKRORJ\ " +RUPRQH V DQG %HKDYLRU " \$QLPDO &RJQLWLRQ " 3V\FKRORJ\ RI (PRWLRQ " 1HXURSV\FKRORJ\	
36<	3V\FKRORJ\ RI /HDUQLQJ	
36<	,QWURGXFWRQ WR &RJQLWLYH 3URFHVVH	
36<	6HQVDWLRQ DQG 3HUFHSWLRQ	
36<	3K\VLORRJLFDO 3V\FKRORJ\	
36<	3V\FKRSKDUPDFRORJ\	
36<	&RPSDUDWLYH 3V\FKRORJ\	
36<	(YROXWLRQDU\ 3V\FKRORJ\	
*URXS		
36<	&RXQVHOLQJ DQG &RPPXQLFDWLRQ	
36<	&KLOG DQG \$GROHVFHQW 'HYHORSPHQW	
36<	\$GXOW 'HYHORSPHQW DQG \$JLQJ	
36<	\$EQRUPDO 3V\FKRORJ\	
36<	6RFLDO 3V\FKRORJ\	

36<

3V\FKRORJ\ RI 'HDWK '\LQJ XQLW

,QWURGXFWRQ WR PRGHV RI JULHI DQG PRXUQLQJ SV\FKRORJLFDO XQGHUVWDQ

KRXVHKROG FRQWHQWV WHFKQRORJLFDO GHYLFHV GHFRUDWLYH DUWV DXWRPRE
KXPDQ QHHGV DQG DVSLUDWLRQV" :KDW DVSHFV RI RXU SHUVRQDOLW\ DQG RXU F
7KLV ZLOO EH DQ LQWHUHVWLQJ DQG DFWLYH FODVV

36< 1HXURSV\FKRORJ\ XQLW
7KLV FRXUVH FRYHUV WKH EDVLFV RI QHXURSV\FKRORJLFDO IXQFWLRQLQJ 7RSLFV
DQG EHKDYLRUDO HIIHFWV RI YDULRXV W\SHV RI EUDLQ GDPDJH QHXURORJLFDO E

36< &RXQVHOLQJ DQG &RPPXQLFDWLRQ XQLWV
'HYHORSPHQW RI LQGLYLGXDO DQG JURXS FRXQVHOLQJ VNLOOV VXFK DV HIIHFWLY
VHQVLWLYLW\ WR LQGLYLGXDO YDOXH V\VWHPV 9DULRXV WKHRUHWLFDQ DSSURDF
UHDGLQJV ILOPV WDSHV DQG H[SHULHQWLDQ H[HUFLVHV

36< 7KHRULHV RI 3HUVRQDOLW\ +LVWRU\ DQG 6\VWHPV , XQLWV
7KH KLVWRULFDQ HYROXWLRQ RI SV\FKRORJ\ IURP WKH *UHHNV WR DQG WKH YD
RI 'SHUVRQDOLW\ ' (PSKDVLV RQ SULPDU\ VRXUFH UHDGLQJV DQG RQ FRPSDULVRQ
WKH GLVFLSOLQH 7KHRULVWV LQFOXGH)UHXG -XQJ \$GOHU -DPHV WKH *HVWDOV
RXWVLGH RI FODVV DFWLYLWLHV WKDW PD\ LQFOXGH EXW QRW EH OLPLWHG WR W
SDUWLFLSDWLRQ LQ RQOLQH GLVFXVVRQ IRUXPV \$OO VWXGHQWV PXVW KDYH DFF

36< 7KHRULHV RI 3HUVRQDOLW\ +LVWRU\ DQG 6\VWHPV ,, XQLWV
7KH KLVWRULFDQ HYROXWLRQ RI SV\FKRORJ\ DQG WKH YDULRXV SRVLWLRQV DQG W
RQ SULPDU\ VRXUFH UHDGLQJV DQG RQ FRPSDULVRQ DQG FRQWUDVW DPRQJ YDULR
LQFOXGH :DWVRQ 6NLQQHU 6XOOLYDQ \$OOSRUW %RZOE\ 5RJHUV KXPDQLVWV D

36< &KLOG \$GROHVFHQW 'HYHORSPHQW XQLWV
+XPDQ JURZWK DQG GHYHORSPHQW IURP SUHQDWHO GHYHORSPHQW WKURXJK DGR
VRFLDO HPRWLRQDO SURFHVVHV ZLWKLQ WKH FRQWH[W RI IDPLO\ FXOWXUH DQG V
SUDFWLFDQ DSSOLFDWLRQV 3DUW RI WKH FXUULFXOXP IRU WKLV FRXUVH ZLOO LQ
WR WKH IROORZLQJ SURMHFWV DQDO\VLV RI UHDGLQJV DQG ILOPV DQG RU SDUW
DFFHVV WR WKH ORRGOH FRXUVH RUJDQL]DWLRQ SURJUDP

36< \$GXOW 'HYHORSPHQW \$JLQJ XQLWV
+XPDQ JURZWK DQG GHYHORSPHQW IURP HDUO\ WR ODWH DGXOWKRRG LQFOXGLQJ
IDPLOLDQ YRFDWLRQDO VH[XDO UHOLJLRXV DQG SHUVRQDO SURFHVVHV DV WKH
SURFHVV 127(0HHWV *URXS ,, UHTXLUHPHQW

36< \$EQRUPDO 3V\FKRORJ\ XQLWV
7KH SV\FKRORJ\ RI PHQWDO LOOQHVV SV\FKRORJ\ GHSUHVVRQ DQ[LHW\ SHUVRQ
WH[WV UHDGLQJV ILOPV DQG FDVH KLVWRULHV 3DUW RI WKH FXUULFXOXP IRU W
LQFOXGH EXW QRW EH OLPLWHG WR WKH IROORZLQJ SURMHFWV DQDO\VLV RI UH
\$OO VWXGHQWV PXVW KDYH DFFHVV WR WKH ORRGOH FRXUVH RUJDQL]DWLRQ SURJ

36<)DPLO\ 'QDPLFV XQLWV
\$ V\VWHPV DSSURDFK WR PDUULDJH DQG IDPLO\ UHODWLRQVKLSV IRFXVLQJ RQ SV
SURPRWH RU UHVWULFW LQWLPDF\ DQG KHDOWK

36< 6RFLDO 3V\FKRORJ\ XQLWV
6RFLDO LQIOXHQFHV RQ PRWLYHV DWLWXGHV DQG EHKDYLRU 7RSLFV LQFOXGH
DOWUXLVP SUHMXGLFH PRE SV\FKRORJ\ DIILOLDWLRQ IULHQGVKLS DQG ORYH /
UHTXLUHPHQW

'RPLQLFDQ 8QLYHUVLW\ RI &DOLIRUQLD \$GXOW 'HJUHH &RPSOHWLRQ 3URJUDPV *HQHUDORJ DQG \$GPLVV

36< 6PDOO *URXS ,QWHUDFWLRQ XQLWV
\$QDO\VLV RI VPDOO JURXS G\QDPLFV VWUXFWXUH SURFHVV UROHV DOOLDQFHV
/HFWXUHV GHPRQVWUDWLRQV DQG SUDFWLFDO JURXS H[SHULHQFH

36< 0HGLDWLRQ 1HJRWLDWLRQ XQLWV
7KH SUDFWLFDO XVH RI HIIHFWLYH FRPPXQLFDWLRQ QHJRWLDWLRQ DQG PHGLDWL
URKQV LQ WKH WJPH 0`À`\$GÀ@ÁV LVERPHER EU`p€D00@-@000P pãV0E`p€@@/V@Ap@00A`p`@€000
DVQGV\$QULFWÄPCSHUI ÄP LVR@ `D0

36< 6WDWLWLVFV IRU +HDOWK %HKDYLRUDO 6FLHQFHV XQLWV
'HVFULSWLYH DQG LQIHUHQWLDQ VWDWLWLVFV DV WKH\ DUH DSSOLHG WR D YDULH
7RSLFV LQFOXGH GDWD VXPPDU\ DQG SUHVHQWDLRQ PHDVXUHV RI FHQWUDO WH
VDPSOLQJ DQG K\SRWKHVLV WHVWLQJ DQG XVLQJ D FRPSXWHU VRIWZDUH SDFNDJH
ZLWK D JUDGH RI µ&¶ RU EHWWHU DQ DSSURYHG FRPSDUDEOH FRXUVH IUR
VFRUH \$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP 0\$7+ ZLWK D JUDGH RI µ&¶ R

36< 5HVHDFK 0HWKRGV XQLWV
0HWKRGV RI LQYHVWLJDWLRQ LQ WKH EHKDYLRUDO VFLHQFHV ,QFOXGHV H[SHULPH
7KH FRXUVH IRFXVHV RQ WKH PDMRU VWHSV LQ WKH UHVHDFK SURFHVV UHVHDF

36< 1DWXUDO 'LVDVWHUV 5HDFWLRQ WR 5LVN XQLWV
7KH VRFLDO HFRQRPLF SROLWLFDO DQG SV\FKRORJLFDO LPSDFW RI QDWXUDO KD
ZKLFK FDXVH VXFK GLVDVWHUV DUHDV WKDW DUH PRVW DW ULVN IURP FHUWDLQ
UHFHYHU\

36< +HDOWK 3V\FKRORJ\ XQLWV
)RFXVHV RQ WKH SV\FKRORJLFDO LQIOXHQFHV WKDW DIIHFW RXU SK\VLFDQ KHDOW
LQWHUDFWLRQV EHWZHHQ PLQG DQG ERG\

36< (QYLURQPHQWDO 3V\FKRORJ\ XQLWV
7KH LPSDFW RI WKH QDWXUDO RU SK\VLFDQ HQYLURQPHQW RQ EHKDYLRU DQG KHD
DQG SHUVRQDO VSDFH

36< 6SRUWV 3V\FKRORJ\ XQLWV
7KLV FRXUVH H[SORUHV WKH DSSOLFDWLRQ RI SV\FKRORJ\ WR WKH XQGHUVWDQGL
3OD\ DQG 6WUHV 0DQDJHPHQW 7KH XVH RI YDULRXV VWUDWHJLVH WR HQKDQFH S
DUHDV VXFK DV EXVLQHV DUW HGXFDWLRQ GDQFH WHDFKLQJ UHODWLRQV KLSV

36< 3V\FKRORJ\ RI :RPHQ XQLWV
\$QDO\VLV RI WKH SV\FKRORJLFDO UHDOOLWLVH RI ZRPHQ¶V OLYHV RUJDQL]HG DURX
LQIDQF\ WR DGXOWKRRG DQG DJLQJ

36< +XPDQ 6H[XDOLW\ XQLWV
\$ VXUYH\ RI WKH ELRORJLFDO SV\FKRORJLFDO DQG VRFLDO DVSHFWV RI VH[XDOL
UHSURGXFWRQ VH[XDOO\ WUDQVPLWWHG GLVHDVHV VH[LQ WKH PHGLD HWF

36< 3V\FKRORJ\ DUPDFRORJ\ XQLWV
([DPLQHV WKH HIIHFWV RI SV\FKRDFWLYH GUXJV RQ QHXUR FKHPLFDO PHQWDO DQ
QDUFRWLF DQG KDOOXFLQRJHQLF GUXJV ZLOO EH VWXGLHG DV ZLOO GUXJV XVHG
DQG VFKL]RSKUHQLD 3UHUHTXLVLWH 36< 127(0HHWV *URXS , UHTXLUHPHQW

36< (YROXWLRQDU\ 3V\FKRORJ\ XQLWV
([DPLQHV WKH HIIHFWV RI SV\FKRORJ\ RQ DSSOLFDWLRQV WR WKH XQGHUVWDQGL

36< 0HGLD 3V\FKRORJ\ 79 6RFLHW\ XQLWV
7KH LQIOXHQFH RI WHOHYLVLRQ RQ VRFLDO WUHQGV DWLWXGHV EHKDYLRU DQG
KLVWRULFDO WUHQGV DQG PLOHVWRQHV LQ SURJUDPPHQJ DV ZHOO DV WKHRU\ DQG
3V\FKRORJ\ 7RSLFV LQFOXGH SRUWUD\DO RI PLQRULW\ JURXSV LPSDFW RI PHGLD
WUHQG LQ 5HDOLW\ 79

36<)RUHQVLF 3V\FKRORJ\ XQLWV
([DPLQHV WKH LQWHUDFWLRQ RI SV\FKRORJ\ DQG WKH OHJDO V\VWHP 7RSLFV LQFOXGH
GHWHFWLRQ RIIHQGHU UHKDELOLWDWLRQ DQG FULPLQDO SURILOLQJ \$OVR H[DPLQHV
SV\FKRORJ\

36< (FRSV\FKRORJ\ XQLWV
(FRSV\FKRORJ\ LV DQ LQWURGXFWRU\ FRXUVH H[DPLQLQJ DQ LQGLYLGXDO V UHODWLYH
WKH LQGLYLGXDO LV LQIOXHQFHG E\ WKH HQYLURQPHQW DQG KRZ RQH V SV\FKRORJ\
~~FRSV\FKRORJ\ LV DQ LQWURGXFWRU\ FRXUVH H[DPLQLQJ DQ LQGLYLGXDO V UHODWLYH WKH LQGLYLGXDO LV LQIOXHQFHG E\ WKH HQYLURQPHQW DQG KRZ RQH V SV\FKRORJ\~~

36< ,QGSHQGHQW 6WXG\ XQLWV
7KH SULYLOHJH RI LQGSHQGHQW VWXG\ LV SRVVLEOH IRU VWXGHQWV ZKR DUH SU
DSSURYDO RI WKH &KDLU RI WKH GHSDUWPHQW WKH LQVWUXFWRU FRQFHUQH G
FRYHUHG E\ D UHJXODUO\ VFKHGXOHG FRXUVH &RXUVH PD\ EH WDNHQ IRU XQLW
RQH VPHVWHU E\ LQGSHQGHQW VWXG\ LV D WRWDO RI XS WR VL[XQLWV RI LQ

\$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP
(GXFDWLRQ DQG \$GPLVVLRQV ,QIRUPD

\$GXOW 'HJUHH &RPSOHWLRQ '\$& 3UR

'RPLQLFDQ 8QLYHUVLW\ RI &DOLIRUQLD V \$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP '\$
XQGHUJUDGDWH GHJUHH ZKLOH FRQWLQXLQJ WR IXOILOO FDUHHU DQG IDPLO\ UHV
DSSOLFDQWV KDYH D PLQLPXP RI VL\ \HDUV RI SRVW KLJK VFKRRO ZRUN H[SHULHQF
PLQLPXP RI WUDQVIHUDEOH FROOHJH FUHGLWV

7KH '\$& SURJUDP PLVVLRQ LV WR PHHW WKH KLJKHU HGXFDWLRQDO QHHGV RI DGXOW
VXSSRUW VHUylfHV ZKLFK HPEUDFH WKH H[SHULHQFH RI DGXOWV UHWXUQLQJ WR V
3URJUDPV DUH RIIHUG LQ WKH OLEHUDO DUWV DQG LQ WKH EXVLQHVV DQG SV\FKR

\$OO '\$& FRXUVHV DUH DFFHOHUDWHG DQG HLWKHU PHHW RQ ZHHNGD\ HYHQLQJV RU
WKURXJK 7KXUVGD\ DOORZLQJ VWXGHQWV ZLWK FRQVLGHUDEOH GLVFUHWLRQDU\ W
DGGLWLRQ WR DWWHQGLQJ ZHHNO\ FODVVHV VWXGHQWV VKRXOG H[SHFW WR VSHQ
RQH FUHGLW XQLW ZHHNO\

'@UHQHHE SURJUDP PV' &UH..L QW HUG#LVSFA SGLQPEU< @XOPWLF XIGVEXUDAO@ DQG HJVABE DOALGEOR

*HWWLQJ 6WDUWHG

,Q WKH ILUVV VHPHVWHU RI FRXUVHZRUN DW 'RPLQLFDQ VWXGHQWV HQUROO LQ W
DFDGHPLF VNLOOV WKH\ ZLOO QHHG WR FRPSOHWH WKHLU GHJUHH SURJUDPV \$OO
\$PHULFDQ 3OXUDOLVP DQG PD\ HQUROO LQ DGGLWLRQDO *HQHUDO (GXFDWLRQ HO

(OHFWLYH 8QLWV

(OHFWLYH XQLWV PD\ EH WDNHQ LQ DQ\ GLVFLSOLQH LQ WKH \$GXOW 'HJUHH &RPSO
3ULRU /HDUQLQJ \$VVHVPPHQW RSWLRQV VHH EHORZ \$ OLPLWHG QXPEHU RI HOHFV
FXUULFXOXP DV ZHOO

\$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP 6WXGHQWV±'HFODU

\$' & VWXGHQWV PXVW GHFODUH DQ LQWHQGHG PDMRU ZKHQ WKH\ DSSO\ IRU DGPLV
ODMRU IRUP ZLWK DOO UHTXLUHG VLJQDWXUHV WR WKH 5HJLVWUDU\ V 2IILFH

3ULRU /HDUQLQJ \$VVHVPPHQW

7KURXJK 3ULRU /HDUQLQJ \$VVHVPPHQW VWXGHQWV FDQ LGHQWLI\ DQG YDOLGDWH
FRRUGLQDWHV WKH 8QLYHUVLW\ V RSWLRQV IRU WKH GHPRQVWUDWLRQ RI OHDUQL
RSWLRQV LQFOXGH OHDUQLQJ DFFRPSOLVKHG RXWVLGH WKH WUDGLWLRQDO DFDGH
3RUWIROLR SURFHVV VWDQGDUGLJHG H[DPLQDWLRQV LQFOXGLQJ \$GYDQFHG 3ODFH
([DPLQDWLRQ 3URJUDP &/(3 WKH ([FHOVLRU &ROOHJH ([DPLQDWLRQ 3URJUDP IRU
'DQWHV DQG \$(3216, UHFRPPHQGHG FRXUVHV

(OLJLELOLW\ IRU WKH FRXUVH (1*/ &ULWLFDO ,QTXLU\ DQG 5HIOHFWLYH :ULWLQ
UHTXLUHV WKDW VWXGHQWV KDYH D PLQLXP RI \HDUV OLIH H[SHULHQFH VLQFH F

6HH WKH ([SHULHQWLDQ HFDWLRQ DQG W\URQ&W GRW LRUH VULQW KHDOO RQ WKLV FDW
DGGLWLRQDO LQIRUPDWLRQ

\$GXOW 'HJUHH &RPSOHWLRQ '\$& 3UR
\$GPLVLRQ 5HTXLUHPHQWV

8QGHUJUDGXDWH \$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP \$

'HPRQVWUDWLRQ RI VL[\HDUV RI SRVW KLJK VFKRRO ZRUN H[SHULHQFH ZKLF
FDUHJLYHU

&HUWLILFDWLRQ RI KLJK VFKRRO FRPSOHWLRQ RU HTXLYDOHQW RQ \$SSOLF

'HPRQVWUDWLRQ RI D PLQLPXP RI WUDQVIHUDEOH FUHGLWV

'HPRQVWUDWLRQ RI D PLQLPXP WUDQVIHU *3\$ RI

6XEPLVLRQ RI 2QOLQH \$SSOLFDFWLRQ IRU \$GPLVLRQV IRUP

6XEPLVLRQ RI RIILFLDO FROOHJH WUDQVFULSW V 7KLV LQFOXGHV WUDQVFL

WKH \$PHULFDQ &RXQFLO RQ (GXFDWLRQ DQG WKH 1DWLRQDO 3URJUDP RQ 1RQ

7KRXJK QRW UHTXLUHG IRU DGPLVLRQ DSSOLFDFWV ZLWK LQWHUQDWLRQDO WUD
DQG RU PDMRU FRXUVHV ZLOO QHHG WR VXEPLW FRXUVH GHVFULSWLRQV RU \OOD

3HWLWLRQ 3URFHVV

,QGLYLGXDOV ZKR GR QRW PHHW WKH SRVW KLJK VFKRRO JUDGXDWLRQ H[SHULHQF

H[FHSWLRQ WR WKLV VWDQGDUG PXVW VXEPLW RIILFLDO WUDQVFULSWV WKDW GHP

SURFHVV IRU DGPLVLRQ WR WKH \$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP

RU PRUH WUDQVIHUDEOH XQLWV

WUDQVIHU *3\$

,Q DGGLWLRQ WR RIILFLDO WUDQVFULSWV DQG WKH DSSOLFDFWLRQ D FRPSOHWH S

\$ OHWWHU RI SHWLWLRQ ZLWK FDQGLGDWH V UDWRQDOH IRU HQWHULQJ WKH

H[SHULHQFH SRVW KLJK VFKRRO JUDGXDWLRQ

\$Q LQWHUYLHZ ZLWK DQ \$GXOW 'HJUHH &RPSOHWLRQ 3URJUDP DFDGHPLF DGY

&UHGLW +RXU 3ROLF\

'HILQLWBRQ

\$ FUHGLW KRXU LV DQ DPRXQW RI ZRUN UHSUHVHQWHG LQ LQWHQGHHG OHDUQLQJ R
LV DQ LQVWLWXWLRQDOO\ HVWDEOLVKHG HTXLYDOHQF\ WKDW UHDVQRDEO\ DSSUR[
" 2QH KRXU RI FODVVURRP RU GLUHFW IDFXOW\ LQVWUXFWLRQ DQG D PLQLPXP

\$GXOW 'HJUHH &RPSOHWLRQ '\$& 3URF 3ODFHPHQW 3ROLF\

7KLV SROLF\ DVVXPHV WKH *(0DWKHPDWLFDO 7KLQNLQJ DQG 4XDQWLWDWLYH 5HDV
RQH RI WKH IROORZLQJ FRXUVHV 0\$7+ 4XDQWLWDWLYH 5HDVRLQJ XQLWV
XQLWV RU 36< 6WDWLWVWLFV IRU WKH +HDOWK DQG %HKDYLRUDO 6FLHQFHV

\$OO '\$& VWXGHQWV ZKR KDYH QRW PHW WKH *(4XDQWLWDWLYH 5HDVRLQJ UHTXL
XQOHVV WKH\ DUH 3V\FKRORJ\ RU 0DQDJHPPHQW PDMRUV ZKR KDYH SDVVHG D FROO
DQ DSSURSULDWH VFRUH RQ WKH \$/(.6 DVVHVVPHQW H[DP RU WKH &/(.3 0DWK H[DP

7KH \$/(.6 DVVHVVPHQW H[DP OHDUQLQJ PRGXOHV VHUYH WKUHH SXUSRVHV
7R LQIRUP 0\$7+ LQVWUXFWRUV DQG WKH 7HDFKLQJ /HDUQLQJ &HQWHU R
7R SURYLGH VWXGHQWV ZLWK D UHIUHVKHU RSSRUWXQLW\ WR SUDFWLFH VNL
7R DOORZ 0DQDJHPPHQW DQG 3V\FKRORJ\ PDMRUV WR SODFH GLUHFWO\ LQWR
SURILFLHQF\ LV PHW

)RU IXUWKHU LQIRUPDWLRQ UHJDUGLQJ WKH \$GXOW 'HJUHH &RPSOHWLRQ 3URJUDPV
(GXFDWLRQ 3URJUDPV DQG &RXUVHV VHFWRU RI WKLV FDWDORJ

6WXGHQWV ZKR SODFH GLUHFWO\ LQWR %86 RU 36<
,Q RUGHU WR SODFH GLUHFWO\ LQWR %86 RU 36< VWXGHQWV PXV PHHW R
" 3DVV D FROOHJH OHYHO ,QWHUPHGLDWH \$OJHEUD FRXUVH DUWLFXODWHG DQ
RU KLJKHU
" \$FKLHYH D VFRUH RI RQ WKH \$/(.6 DVVHVVPHQW H[DP
" \$FKLHYH D VFRUH RI DW OHDVW RQ WKH 0DWK &/(.3 H[DP

1RWH \$OO SUHUHTXLVLWHV PXV EH SDVVHG ZLWK D μ&¶ RU KLJKHU EHIRUH

\$GXOW 'HJUHH &RPSOHWLRQ '\$& 3UR
(GXFDWLRQ 6WDWHPHQW RI 3XUSR VH

7KH \$GXOW 'HJUHH &RPSOHWLRQ *HQHUDO (GXFDWLRQ 3URJUDP IRVWHUV WKH GHY
HVVHQWLDO WR OLIHORQJ OHDUQLQJ DQG D ULFK VDWLVI\LQJ OLIH E\
3URYLGLQJ VWXGHQWV ZLWK HVVHQWLDO IRXQGDWLRQV LQ WKH PDLQ DUHDV
(QJDJLQJ VWXGHQWV LQ WKH SHUVLVWHQW SUDFWLFH RI FULWLFDO WKLQNLQJ
H[SUHVVLQJ DQG HIIHFWLYH UHVHDUFK DQG VSHDNLQJ
(QKDQFLQJ VHOI XQGHUVWDQGLQJ DV FLWL]HQV RI GLYHUVH FRPPXQLWLHV L
,Q OLJKW RI 'RPLQLFDQV &DWKROLF KHULWDJH RIIHULQJ JXLGDQFH±DQG IU
DQG VSLULWXDO GLPHQVLRQV RI H[LVWHQFH

'& *HQHUDO (GXFDWLRQ *RDOV

6WXGHQWV ZLOO GHPRQVUDWH
/HDUQLQJ LQ WKH HVVHQWLDO IRXQGDWLRQV LQ WKH PDLQ DUHDV RI KXPDQ
3HUVLVWHQW SUDFWLFH RI FULWLFDO WKLQNLQJ SHUVXDVLVH ZULWLQJ TXD
UHVHDUFK DQG VSHDNLQJ
8QGHUVWDQGLQJ RI WKHPVHOYHV DV FLWL]HQV RI GLYHUVH FRPPXQLWLHV LQ
'HYHORSPHQW RI WKHLU DZDUHQHV RI WKH PRUDO DQG VSLULWXDO GLPHQVLRQ

\$GXOW 'HJUHH &RPSOHWLRQ \$' & 3UF
 (GXFDWLRQ 2YHUYLHZ

&RPSRQHGW 1DPH	7\SH	8QLWV
)RXQGDWLRQV	0XOWLGLVFLSOLQDU\ 6NLOOV	
\$GYDQFHG :ULWLQJ DQG 5HVHD	6NLOO	
0DWKHPDWLFDO 7KLQNLQJ DQG	6NLOO	
6RFLDO 6FLHQFH	.QRZOHGJH \$UHD	
1DWXUDO 6FLHQFH	.QRZOHGJH \$UHD	
&UHDWLYH DQG 3HUIRUPLQJ \$U	.QRZOHGJH \$UHD 6NLOO	
(WKLFV	.QRZOHGJH \$UHD	

\$GXOW 'HJUHH &RPSOHWLRQ '\$& 3UR
(GXFDWLRQ 3URJUDP DQG &RXUVHV

)RXQGDWLRQV XQLWV

\$Q LQWHUGLVFLSOLQDU\ VWXG\ RI FRQWHPSTRUDU\ LVVXHV RI 8 6 FXOWXUH ZLWKL
DQG UHVXPLQJ WKHLU DFDGHPLF HGXFDWLRQ 7KURXJK WKLW H[SORUDWLRQ VWXGH
UHDGLQJ VSHDNLQJ OLVWHQLQJ DQG ZULWLQJ DQG WKH\ LQWHJUDWH WKHLU SH
DQG JRDOV 6WXGHQWV PXVW FRPSOHWH WKLW FRXUVH DW 'RPLQLFDQ ZLWK D μ&¶

&RXUVH WKDW)XOILQOV WKH 5HTXLUHPHQW

" +&6)RXQGDWLRQV \$PHULFDQ 3OXUDOLVP XQLWV RU
")RU UHWXUQLQJ WKH XGHQWV L RXVO\ UHTXLUH)RXQGDWLRQV FRXUVH V DW 'R
DFFHSWHG RQO\ LI VWXGHQWV KDYH DOUHDG\ IXOILQOHG WKH *(ZULWLQJ DQ
VXFK FRXUVHV WDNHQ EHIRUH)DOO ZLOO EH DFFHSWHG DV HOHFWLYH XQ

&RXUVH /HQUQLQJ 2XWFRPHV

7KH VWXGHQW ZLOO
'HPRQVUDWH DQ LQWHUGLVFLSOLQDU\ XQGHUVWDQGLQJ RI VSHFLILF FRQW
'HPRQVUDWH DQ XQGHUVWDQGLQJ RI WKH UHODWLRQVKLS EHWZHHQ OLIH H
:ULWH XQLYHUVLW\ OHYHO HVVD\V WKDW LQFOXGH
| 6SHFLILF GHEDWDEOH WKHVHV
| 5HOHYDQW FRJHQW DQG YDOLG VXSSRUWLQJ HYLGHQFH
| /RJLQDO DQG FRKHUHQW RUJDQL]DWLRQ LQFOXGLQJ HIIHFWLYH SDUDJUL
| 3UHFLVH ZRUG FKRLFH DQG FRUHFHQWV LQ VSHOOLQJ JUDPPDU PHF
| \$\$\$SUSULDWH UHVHDFK PHWKRGV DQG GRFXPHQDWLRQ
'HVLJQ D FRJHQW RUDO DUJXPHQW VXLWDEOH WR WKH WRSLF SXUSRVH DQG
'HOLYHU HIIHFWLYH LQIRUPDWLYH VSHHFKHV
&ULWLFDQO\ HYDOXDWH FRQWHQW DQG GHOLYHU\ RI SHHU RUDO VSHHFKHV

&RXUVH 'HVFULSWLRQ

+&6)RXQGDWLRQV \$PHULFDQ 3OXUDOLVP XQLWV
\$Q LQWHUGLVFLSOLQDU\ H[DPLQDWLRQ RI WKH PXOWLFXOWXUDO IDEULF RI \$PHULF
HVVHQWLDO VNLOOV IRU DFDGHPLF VXFFHVV WKLW FRXUVH FULWLFDQO\ H[DPLQHV
WKURXJK FORVH UHDGLQJ RI KLVWRULQDO GRFXPHQWV HVVD\V QDUUDWLYHV VSH
ZULWLQJ MRXUQDOLQJ RUDO SUHVHQDWLRQV DQG LQ FODVV GLVFXVVRQV VKDU
HGXFDFWHG LQGLYLGXDO SOD\ V LQ RXU VRFLHW\ 7KLV FRXUVH UHLQIRUFHV 'RPLQL
VWXG\ UHIOHFWLRQ FRPPXQLW\ DQG VHUYLPH

\$GYDQFHG :ULWLQJ DQG 5HVHDFK XQLWV

)XUWKHU GHYHORSPHQW RI FRPSHWHQFLHV LQ FULWLFDQ WKLQNLQJ H[SRVLWRU\ Z
LGHQWLI\LQJ VXPPDUL]LQJ HYDOXDWLQJ DQG LQWHJUDWLQJ LQIRUPDWLRQ 6WXG
RU KLJKHU 3UHHTXLVLWH SDVVLQJ +&6 ZLWK D JUDGH RI μ&¶ RU KLJKHU

&RXUVH WKDW)XOILQOV WKH 5HTXLUHPHQW

" (1*/ &ULWLFDQ ,QTXLU\ DQG 5HIOHFWLYH :ULWLQJ XQLWV ZLWK D JUDGH
'RPLQLFDQ

'RPLQLFDQ 8QLYHUVLW\ RI &DOLIRUQLD \$GXOW 'HJUHH &RPSOHWLRQ 3URJUDPV *HQHUDORJ DQG \$GPLVVL

36 <

, QWURGXFWRQ WR 3V\FKRORJ\

XQLWV

2U DQ\ FRXUVH WKDW IXOILQOV WKH UHTXLUHPHQW LQ WKH 'D\ 3URJUDP DQG WKDW

&RXUVH /HQUQLQJ 2XWFRPHV

7KH VWXGHQW ZLOO

,GHQWLI\ LPSRUWDQW FRQFHSHV DQG PHWKRGV XQGHU VWXG\

\$SSO\ WKH DERYH WR WKH FUHDWLRQ RI ZRUNV LQ WKH DUWLWLF JHQH

086 'RPLQLFDQ &KRUDOH XQLW
\$ FRPPXQLW\ FKRUXV RSHQ WR DOO VWXGHQWV IDFXOW\ VWDII DQG FRPPXQLW\ F
RUFKHVWUD 0D\ EH UHSHDWHG IRU FUHGLW \$XGLWLRQ UHTXLUHG

&RXUVH /H DUQLQJ 2XWFRPHV

7KH VWXGHQW ZLOO

([SODLQ NH\ IHDWXUHV H J VFULSWXUDO FRQWHQWV DQG FRQWH[W PDMRU
VSLULWXDOLW\ HWKLFDO SHUVSHFWLYHV WKHRORJ\ LPSDFW RQ FXOWXUH F
\$QDO\]H VXFK IHDWXUHV FULWLFDOO\ SHU DW OHDVW RQH RI WKH IROORZLQJ
D 7KHLU LPSOLFDWLRQ IRU GHDOLQJ ZLWK SUREOHPV LQ FRQWHPSRUDU\
LVVXH SRYHUW\ ZDU UHOLJLRXV GLYHUVLW\ VFLHQFH DQG UHOLJLRQ
E 7KHLU LPSDFW RQ WKH VWXGHQW¶V SHUVRQDO TXHVW IRU PHDQLQJ DQ
([SUHVW WKHLU NQRZOHGJH LQ VRPH HIIHFWLYH ZULWWHQ GRFXPHQW H J H
MRXUQDO

&RXUVH 'HVFULSWLRQ

5/*1 7KH :RUOG V 5HOLJLRQV XQLWV

\$ VWXG\ RI KXPQNLQG¶V XOWLPDWH DQG HQGXULQJ TXHVWLRQV±WKH QDWXUH RI
EDFNJURXQG RI LWV PXOWLIRUP VSLULWXDO KHULWDJH 7KH FRXUVH ZLOO VXUYH\
,VODP +LQGXLVP %XGGKLVP &RQIXFLDQLVP DQG 7DRLVP DFFHQWLQJ ERWK WKH
DWWHQWLRQ WR WKH XQLTXH VRFLDO YLVLRQ RI WKH -XGHR &KULVWLDQ WUDGLWL