



3 2UJDQL]DWLRQDO 'HVFULSWLRQ
\$QWKHP 6FKRRO LV D SUH NLQGHUJDUWHQ WKURXJK WK
JUDGH VFKRRO \$V DQ \$ 6FKRRO RI ([FHOHQFH ZH
DUH FRPPLWWHG WR LQVSLULQJ SUREOHP VROYHUV DQG
OLIHORQJ OHDUQHUV WKURXJK FKDUDFWHU FROODERUDWLRQ
DQG FUHDWLW\ 7KH SDUWQHUVKLS ZLWK WKH &LYLO \$LU
3DWURO DQG XWLOL]DWLRQ RI WKH \$&(\$HURVSDFH
&RQQHFWRQV LQ (GXFDWLRQ FXUULFXOX P LV DQ
HVVHQWLDO FRPSRQHQW RI WKH \$HURVSDFH \$FDGHP\
\$OO VWXGHQWV LQ JUDGHV .LQGHUJDUWHQ WKURXJK WK
JUDGH SDUWLFLSDWH LQ WKH \$&(\$SURJUDP \$QWKHP LV
SDUW RI WKH WK ODUJHVW VFKRRO GLVWULFW LQ 3KRHQL[±
'HHU 9DOOH\ 8QLILHG 6FKRRO 'LVWULFW

3 D 2UJDQL]DWLRQDO (QYLURQPHQW
3 D 3URJUDPV DQG 6HUYLHV
\$QWKHP 6FKRRO SURYLGHV H[WUDRUGLQDU\ OHDUQLQJ
RSSRUWXQLWLHV IRU \$// VWXGHQWV WKURXJK PHDQLQJIXO
LQWHUDFWLRQV ULJRURXV DQG SHUVRQDOL]HG OHVVRQV
&DPSXV LQLWLDWLYHV LQFOXGH LPSOPHQWDWLRQ RI
5HVSRRQVH WR ,QWHUYHQWLRQ DQG 0XOWL WLHUHG 6\VWHP
RI 6XSSRUWV 7LPH LV GHVLJQDWHG GDLO\ LQ DOO FODVVHV
. WR PHHW VSHFLILF OHDUQLQJ QHHGV DQG SURYLGH
DQDO\VLV RI GDWD WR GHWHUPLQH JDS DUHDV IRU VWXGHQWV
7KLV WLPHV LV XVHG LQ D YDULHW\ RI ZD\V LQFOXGLQJ
VPDOO JURXS LQVWUXFWLRQ IRU VWUXJJOLQJ VWXGHQWV DV
ZHOO DV HQULFKPHQW IRU VWXGHQWV DFKLHYLQJ DW KLJK
OHYHOV 7KLV PHWKRG RI GLIIHUUHQWLDWLRQ LV
LPSOPHQWHG GXULQJ 0766 57, WLPHV LQ RUGHU WR
G SHUVR 0

DOORFDWLRQV WRZDUG FDPSXV JRDOV DQG WKH
LPSOHPHQWDWLRQ DQG LPSDFW RI WKRVH JRDOV 7KH JRDO
RI FUHDWLQJ LPSOHPHQWLQJ DQG FRPPXQLFDWLQJ WKH
GLVWULFW VWUDWHJLF SODQ DW WKH VFKRRQ OHYHO LV
DGGUHVvhg DQG VXSSRUWHG LQ PRQWKQ\ VWDII DQG
&RQWHQW &ROODERUDWLRQ PHHWLQJV /HDGHUVKLS RI
&RQWHQW &ROODERUDWLRQ 7HDPV DQG *UDGH OHYHO
FRPPLWWHHV DUH VHOHFHWG IURP WKLV FRPPLWWHH &,7
LQIRUPDWLRQ LV IXUWKHU FRPPXQLFDWHG WR SDUHQWV
WKURXJK PRQWKQ\ SDUHQW QHZVOHWWHUV

6WDII PHPEHUV HPEUDFH XVLQJ D 3URIHVVLQRQDO
/HDUQLQJ &RPPXQLW\ 3/& PRGHO 7KH\
DSSUHFLDWH WLPH WRJHWKHU WR GLVFXVV VWXGHQW GDWD
LQVWUXFWLRQDO VWUDWHJLHV DQG PHWKRGV WR PHHW
VWXGHQW QHHGV 0HHWLQJ ZHHNO\ 3/&V ZRUN FORVHO\
DV JUDGH OHYHOV WR HQVXUH VWXGHQWV UHFHLYH WKH
KLJKHVW TXDOLW\ LQVWUXFWLRQ DW \$QWKHP 6FKRRQ

\$QWKHP 6FKRRQ\ IRXU &RQWHQW &ROODERUDWLRQ 7HDPV
IRFXV RQ VWXGHQW DFKLHYHFW DQG VWDNHKROGHU
DIIDLUV (DFK WHDFKHU VHUYHV RQ D WHDP GHHSHQLQJ
WKH OD\HUV RI FROOHFWLYH HIILFDF\ ZLWKLQ WKH DFDGHPLF
DVSHFWV RI RXU VFKRRQ 7HDPV PHHW PRQWKQ\ WR
FRQVWUXFW JRDOV ZLWK WKHLU FURVV JUDGH OHYHO SHHUV
VXVWDLQ OHDUQLQJ HQYLURQPHQWV UHYLHZñ %oP ``ð0P€•À€ Å

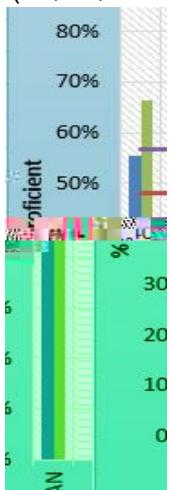
IDFLOLWLHV WR WZR FKXUFK FRQDQWHDW LLRQQWF LHRQFHL U\$ IRFXV
6FRXWV DQG WKH GLVWULFW IRWKFLOONLVQHV DDDQGG FHYPHQW VLFDWLRC
SURJUDP \$ SDUWQHUVKLS ZLWI
7KHUH DUH PDQ\ UHVRXUFHV DQ&\$BXVWIOFRZK SWRXJQHDPW VL@ UHD
WKH FRPPXQLW\ WKDW HQULFK WKPHOHRQV QLQWKRHRU WWWXGHQWW
IDPLOLHV DQG WHDFKHUV)RU XHQFRASOWDRXLURQH@ WWWDFKRU9DC
UHJXODUO\ VXEPLWV VVWXGHQW DUWZRUN WR \$UWVRQLD DQ
RQOLQH DUW JDOOHU\ DV ZHOOSDQ EWXLGHQWVHVJDQGHRWKHSJD
YHQXHV 6WXGHQWV VHH WKHLU\$BKULHZRHUPNQW YD\$O XSHGRJLQDG \$Q
DSSUHFLDWHG EH\RQG WKH VFKEPQFEPHQLWROXQWHHUV WHD
SURJUDP EXLOGV DQ XQGHUVWD
3 E 6XSSOLHUV DQG 3DUWQH@QWUHSUHQHXLVP GLVFXVVLC
7KH &RQWHQW &ROODERUDWLRQ LQHDPFVH ZRQG MRRQHVKLHW WRXFK
KRVW DQ DQQXDO 67(\$0 6FLHQFFHU HZGLFWK QRQGRQHELW FDUGV LQ
(QJLQHHULQJ \$UWV DQG 0DWKHPDWLFV 1LJKW 7KLV
HYHQW LV KLJKO\ SRSXODU ZLWKRHWWDFNHRPHQWQJ (DQG YROXQ
JUDGH SUHVHQWV RQH LQWHUD@WRH RYUHF @S@UFRSQXBW VVWXGH
VFLHQFH DFWLYLW\ WKDW LV FUIKDWQDQ DQGRPRQADWGVHUYLFH
VWVXGHQWV DQG WHDFKHUV \$OOWKHD@HVRGFLDQGDMXWKHVUFXUUL
6FLHQFH DQG /LWHUDF\ ZRUN DQDQG MCKHVR - \$6LVFRQDUDKHDG PDQV
&ROOHJH DQG &DUHHU 5HDGLQHVVHQWDQGRURKVOBDWQ DQG LQW
DFWLYLWLHV DUH JDWKHUHG WRFRP@KMWIPHWQWSWRYLH@YSDZUOQW
YHUWLFDQ YLHZ RI PDWK VNLOOFU BDWJQHVWRERIQLD@W \$FORVAKHF@R
ZKLOH OHDUQLQJ VRPH QHZ PDWK JDPHV DQG DFWLYLWLHV
WR VXSSRUW WKHLU FKLOG\ P@WV 2UJLQD@WLRQDO 6LWXDWLR
GHYHORSPHQW 6WXGHQW &RXQFLB 3D@WLRQDO-XQDQG
+RQRU 6RFLHW\ DQG \$PEDVVDGRU 7KH@IPOORZLQJ SURJUDPV KHOS
JXLGHV WR YLVLWRUV DW WKLV HYHQW \$QWKHP 6FKRROV
UHFHLYHV DQQXDO SDUWLFLSDWLRQOYURP DORFDOEXVLQHVV
WKDW KDYH D VFLHQFH HQYLURQPHQW \$HURVSDFH&RQQRQHFWLRQV
IRFXV VXFK DV +RQHZHOO &KDOO HQJHU 6SD%H&HQWHU
(PEU\ 5LGGOH \$68 DQG 3KRHQL[\$VWURQRP@DO HDUQLQJ &R
6RFLHW\ ZKLFK IDFLOLWDWHV VWDHIIJDLQJWRFRQFOXGH
WKLV SKHQRPHQDO QLJKWWLPH H[SUHQFH@WHDFFKHUPHQWRU
8QLTXH DQG UHVSQRQVLYH JLI
\$QWKHP 6FKRRO\ V LJQDWXUH SURJUDP@LJQRIKLJKO\ TXDOLILHG
(GXFDWLRQ \$QWKHP \$HURVSDFH \$FDGH@X@WV SULRU WR \$=0H
LQLWLDQO\ GHYHORSHG IURP '986\ V SURMHEFW
LQLWLDWLYH \$QWKHP 6FKRRO\ P@WV P@WV
DOLJQHG FUHDWLYHO\ WR WKLV QHZ@R@H@D@XQGDP@H@QWDO
JRDO RI WKH \$HURVSDFH \$FDGH@P@WV P@WV
VWXGHQWV DQG FDSWXUH WKHLU LQWHUHVW LQ WKH VFLHQFH
VSHFLILFDOO\ DHURVSDFH 7KH FDPSXV PLVVLRQ DQG
YLVLRQ FOHDOO\ DOLJQ DV D JOREDO SHUVSHFWLYH DQG
IXWXUH IRFXV LV HVVHQWLDO ZKHQ WKLQNLQJ RI IXWXUH

\$ QWKHP WHDFKHUV KDYH WUDQVKWBRXQKHGV KMR 2012H \$ 83&J56JUDP
 SURIHVVLRQDO GHYHORSPHQW DCRIZJQIRGDW&UHVHFEXLQJ\LQJ DQG
 LQVWUXFWLRQDO VWUDWHJLHV EXOOLHG \$ EHKDYLHU FRPSRQH
 ZHHNO\ FODVV PHHWLQJV WR SU
 VRFLDO HPRWLRQDO QHHGV RI
 GDWD LQGLFDWHV WKDW VWXGH
 SUHSDUHG WR DGGUHVV FKDOO
 VLWXDWLRQV

3 D & RPSDUDWLYH 'DWD
 \$= OHULW 'DWD
 6 WD W'9

UG (/S
 WK (/S
 WK (/S
 WK (/S
 WK (/S
 WK (/S
 UG 0DWK
 WK 0DWK
 WK 0DWK
 WK 0DWK
 WK 0DWK
 WK 0DWK

, QFUHDVH LQ RYHUDOO SURILFLHQF
 0DWK \$= OHULW \$= OHULW



4 X MAR Q \$1 ' 9 86
 \$ WKLWFK R R QWWV G K DZ
 , G R WZHHI GD
 , Q KMDWVYQ GVDRPRQH
 KDRNG R, KDHG R QRRG
 Z RNUWFK R R O

\$ J UH 6 WR QJ QJ UH
 , KYDHMDWWR QMK HZK R
 PDN M PH HOHFLNG EDR XWM
 IXKII
 , NQRZQJIC XND+6
 , NQRZQJQ G JDR RRGEQW
 W HXAH

\$ QWKHP SURYLGHV D FRQVLVWH
 IRU DOO VWXGHQWV \$ QWKHP K
 GLIILFXOW VLWXDWLRQV GR QR
 IRXQGDWLRQ \$ FRQVLVWHQW D
 SUDFWLHG WKURXJKRXW WKH
 HQFRXUDJHG WR EH VDIH UHVS
 7KH 3OHDUQLQJ PDWUL[RI EHK
 UHLQIRUFHG WKURXJKRXW WKH
 DQQRXQFHPHQWV HQG ZLWK DU
 EHKDYH SRVLWLYHO\ GXULQJ W

3 3HUIRUPDQFH , PSURYHPHQW
 \$ QWKHP 6FKRRO XQGHUVWDQGV
 DQG FRPPXQLW\ SOD\ LQ D VWX
 VWUDWHJLF JRDO LV WR IRVWH

WKH FRPPXQLW\ VR WKDW VWXG
 7KUH DUH IRUPDO V\VWHPV LQ DSWRKRPHWRVDELGHWXSHQW\ WKH
 DGGUHVVLQJ WHDVLQJ EXOO\LQJ DQG DQ\ RWKHU QHJDWLHYH
 IHHOLQJV RU LQWHUDFWLRQV \$7 KHH D P7 RR HMHHMDVF KHUXQUDHUYOLHW R
 GDWD JDWKHU LQSXW DQG PDNWKSHU & DIPWSXVU HPSSLWR R Q\HZQW\ QOD
 DSSURSULDWH WR HQVXUH ZH P&RIOWD\WRGBI\WRQHHDGUH DQ H[W
 :HHNO\ FODVV PHHWLQJV DUH KHQGRW\RLQG GDQHO\WWWDHIF\RLHPFEHU
 FRQFHUQV SURYLGLQJ D SHUVRQQDORI\PHQW\RSQURDRFPK & WR PWKHHW LQ
 FRQWHQW \$ QWKHP ZRUNV GLOL&RQW\QWW\&RPOQ\WRD\QWDLQRQ 7H
 DWPRVSKHUU ZKHUH EXOO\LQJ LM HQGREVD FWNRQJHRUPDWW\QII LV ORRSH

3 E 6WUDWHJLF & RQWH[W
 7KUH DUH IRUPDO V\VWHPV LQ DSWRKRPHWRVDELGHWXSHQW\ WKH
 DGGUHVVLQJ WHDVLQJ EXOO\LQJ DQG DQ\ RWKHU QHJDWLHYH
 IHHOLQJV RU LQWHUDFWLRQV \$7 KHH D P7 RR HMHHMDVF KHUXQUDHUYOLHW R
 GDWD JDWKHU LQSXW DQG PDNWKSHU & DIPWSXVU HPSSLWR R Q\HZQW\ QOD
 DSSURSULDWH WR HQVXUH ZH P&RIOWD\WRGBI\WRQHHDGUH DQ H[W
 :HHNO\ FODVV PHHWLQJV DUH KHQGRW\RLQG GDQHO\WWWDHIF\RLHPFEHU
 FRQFHUQV SURYLGLQJ D SHUVRQQDORI\PHQW\RSQURDRFPK & WR PWKHHW LQ
 FRQWHQW \$ QWKHP ZRUNV GLOL&RQW\QWW\&RPOQ\WRD\QWDLQRQ 7H
 DWPRVSKHUU ZKHUH EXOO\LQJ LM HQGREVD FWNRQJHRUPDWW\QII LV ORRSH

SDUWQHUVKLS ZLWK VWXGHQWV VWDII SDUHQWV DQG
FRPPXQLW\ PHPEHUV \$QWKHP ZLOO FRQWLQXH WR
WKULYH