

# 7KH 'LJLWDO (OHFWURQLF 7HFKQRORJ\ FRX WR D YDULHW\ RI QHZ PDMRUV

=RQJL\* <DZHL -L &KXQ[LDR 'RQJ DQG -LQMLQ /LX  
8QLYHUVLW\ RI , QHRUURDWE R RQ(J KRQH +HQDQ &KLQD

\$EVWU,DFWLHZ RI WKH SUDFWLFDO WHDW IDQ. Q SOJ R SOHFW VHQ RRR XDW WBUHH  
SURIHVVLQRQDOVWLQH WKLW D DU(CHRWWIRQL FS D SIFKHORSBBLVPH QHW WHDFKLQ  
PRGH DQG DVVHVVPHQW PHFKDQLVPORIU D KGHF B QGVWF DODGE SH RFSXUVLF  
VXLWDEOH IRU D YDULHW\ RI QHZ PDMRUV 7KH RSWLPL]DWLRQ RI WKH  
FKDUDFWHULVWLFV RI GLIIHUHQW PCHZQ P RZORHUGJHWDFH QMCPW G BUQLQJ  
WHDFKLQJ UHVRXULFHJVP DGHGQH Z RPHSDMWRQV DQGH RSGVLSL]DWLRQ RI FRX  
DQG GHVLJQV WKH TXORZLOVHGDY VHELVPHVOW WLFHFK KQMV BURYHG WKDW F  
RSWLPL]DWLRQ FDQ EHWWHU DGDSW 7WR ERXOWH HFR QMWH QVHW JHVWL  
LPSOHPHQWDWLRQ DUH PRUH UHDFV Q K X OHD VZK IRF KV VXXOH QVRE LVOR JEM D  
WKH FRPSUHKKHQV H VHW V XIDURIPWR XCI WDW DGGH DG KPH Q MVRJQR G WHDFKLQJ UH

,1752'8&7,21

IROORZLQJ PDLQ FRQWUDGLFWLRQV  
FXUULFXOXP GHVLJQ DQG QHZ GLVFLS

:LWK WKH UDSLQ GHYHORSHPHQW RI FRHURRQJ WHHRKQRORJD V(OHFWU  
VXFK DV DUWLILFLDO LQWHOOLRUV H V H XDPJKQV HGW K QWKH SULLQVSD  
V\ VWHPV ELRQVFLSOLQ DLQ LWH U DLG B YE EHV DQDQGNHKK RSHUDWLRQ SUR  
GLVFLSOLQHV D YDULHW\ RI QHZVLD DOROV QHZ V GH VFRSOLQV ZH YDQ GL  
LQWHUGLVFLSOLQDU\ PDMRUV DPHRBRQD V W Q V L R Q HWRL Q KH Z B S O L F D  
SXWV IRUZDUG QHZ UHTXLUHPHQD Q G I R V K H V K H U F R V Q D S Q E F D L V R Q R Q I Z L W H  
EDVLF FRXUVHV DQG GLVFLSOLQ HV D V V K W R V W K J L V D Q N ( R H F V G U F S Q L D F E L O  
7HFKQRORJ\ , Q DGGLWLRQ WKH VGHDPK Q G J I FUR Q W D Q D Q V D Q R M H L D H G U M  
LQ D YDULHW\ RI QHZ PDMRUV KDM DOKRR X Q D H Q G R Q H D S W R F R X Q G K H U H I R  
FKDQJHV FRQWHQW H[SODQDWRQ L W L V Q H F H

7R PHHW WKH GHPDQG IRU WDOGHQVH W H U W W Q G B J U L H Q V I R D U G H W H R H Q W I  
QHZ PDMRUV LQ UHFHQW \H D U V R R W U N Q R Z Y H L G V L H W X H Q H F R S I Q H G  
QHZ PDMRUV VXFK DV DUWLILFLDO L Q W H I O F L Q W Q F H D U X Q P D Q H G Q W H U  
V\ VWHPV DQG ELJ GDWD LQ PDQK BR B O E I H H Q V R U D F G H H G H U L D Q V H D U K R X V  
FXOWLYDWLRQ RI QHZ SURIHVVLQRQ D Q D H W D I O H Q V Z K L F I K H F R X O H G V R W K  
'LJLWDO (OHFWURQLF 7HFKQRORJ\ XULW R D Q K H Q W J R V D X G V B H F W U R Q L F  
SURIHVVLQRQDO EDVLF FRPSXOVRU\ VFRXUVH R X R U V W J P Z H Y L R Q D V K H F R  
GLVFLSOLQHV VXFK DV LQIRUP(DM ERQ R R B Q E L Q H F K Q L Q R O R J D Q Q V P D Q \ N  
FRPPXQLFDWLRQ HQJLQH HULQJ W K V X H Q R Z O B G J H P H U J L Q V J P H P D K M L F D  
LQWHUGLVFLSOLQDU\ GLVFLSOLQ H R P S X H K V D V R Q U W I L I F D D D W Q V H O S R L V H H V  
XQPDQQHG V\ VWHPV DQG ELJ GDWD FRDQQ OR IH F S X D I V Q L Q Q R V Z O H G J H D  
EDVLFV RI ORJIDFWH D O H I H E U X L W V V V F R B E D Q H G T X D O L W \ D Q G D E L O L W \ 7  
VHTXHQWLDO ORJLF FLUFXLWV B H R R W Q D 3 \* S \ Q D D L R 3 P H Q X E D V H G V  
ZDYHIRUP JHQHUDWLRQ DQG VK D S K L R J U H Q V L J L V D D Q Q S O B F D W H R Q Q W H V K  
GLJLWDO FRQYHXU W H U K D M W F K H 7 K H D F U D F V O H U L H D V L K F L V Q J V L W X D W L R Q R I G  
RI WKHRU\ SUDFWLFH RSHUDWLRQ D D Q G \ D D Z Q G H Q H D V R B H Q R L Z P D W F R X L W H H V  
ZKLFK SOD\V D UROH LQ WKH > P Q V L W H U H D Q W Q W Z W G U D L F L S O L Q H W W H P  
+RZHYHU LQ WKH IDFH RI WKH WUDLQ L Q L Q H Q W H G V R R D W U D U L H W L R Q I D O C  
QHZ PDMRUV DQG QHZ WDOHQVVD W K H V W P H I Q M L P H R A K R G F X R U I L F J L O X P O ( )  
GHVLJQ FDQ QR ORQJHU PHHW W K H R X L H G M R F S I W R Q W K Y H X D Q G H D W D Q G I  
RI H[SORUDWLRQ L D Q R X S Q D V W D F H W K V D B H D G U H W K H H F R X U V H D V V H V V P H Q  
XVXDO JUDGHV RI WKH H[SHULPH

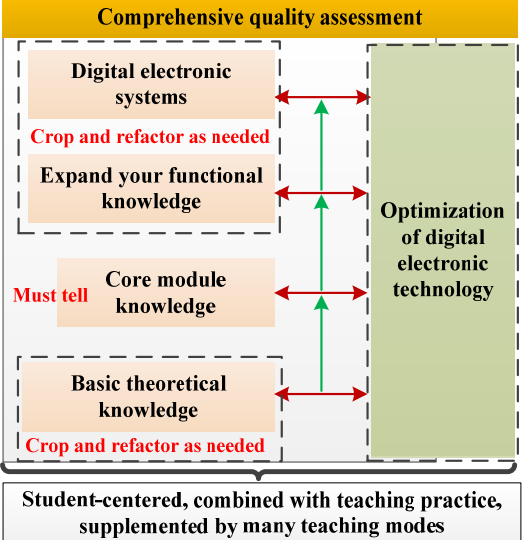
RI WKH ILQDO H[DP \$QG WKH ILQDO M[DP SODHFKWQJ VROXDRMLBQ OH  
YHWR DQG WKHUH LV OHVV H[DFKODDWERG ULIV VVXG HRQ VLIIDH HQMWNPI  
DQG TXDOLW\ 7KH ODFN RI GLYHUWLPLRDOG DQG GUBSFWLP RJDWLFRQ RI  
DVVHVPHQW PHWKRGV OHDGV WFRQWKHQ QOLPLWDFWL RQV DQBJRQHDO JH  
VLGHGQHVV RI WKH DVVHVPHQW EDUHLWXQRWWK HRSORSRZXS VLFRRUMHV  
ILQDO H[DPV LV WRR ODUJH ZKWKUOZLQDOJ SHURGUDW XGMLQ WRF XWRHV RQ  
GHVSLVH WKH H[HUFLVH DQG FXOWRLYD WLODZ OH SHUHDFR QVDFHFWLQDQ WLFHV  
WR D FHUWDLQ H[DUWLPHUW LW LV XURJLQWH WR RHP[ISORJH ZLWK WKH IROO  
D FRPSUHKHQVLYH FXUULFXOX FRXUHWHP HVWH VFKLPHDQV KDW WHP FLU  
DGDSWV WR PXOWLSOH DVSHFWV DQGLDHHWKH SXUSRQB BHDUOLFKL V  
VROYH WKH SUREOHPV RI FRPSUHVV

2SWLPDO GHVLJQV RI WKH FRXUVH

7R VROYH WKH QRXQVDFUWLRO VHDQ WHDFKLOJ YDULHW\ RI WHDF  
WKH RSWLPL]DWLRQ GHVLJQ RI WKH FRXUVH RI WKH L]LWDO (OHFWURQLF 7HFKQRORJYDWLRQV RI H[DGHUHQFH IDUH QHDUQ\ WHD  
HPHULQJ SURIHVVLRQDOV LV PDLQO\ UHIOHFWHG IURP WKUHH DVSHFWV  
DVSHFWV RYHUDOO RSWLPL]DWLRQ L]LWDO FKHDFWURVFKQROR  
RSWLPL]DWLRQ DQG FRXUVH DXXHVDPHWDFRPHWVFKRQVWLF  
RSWLPL]DWLRQ DQG WKH LQQRYPHWKRG WWDVNLGULYFKRQV DQGLQOX  
FOHYHUO\ LQWHJUDWHG LQWR WKH RSWLPL]DWLRQ GHVLJQV LQFOX  
WKHRUHWLFDQV DQGLDHHWKH SUDFWERQWHW

2YHUDOO RSWLPL]HG GHVLJQ 7KURXJK WKH XQUHPLWWLQJ HIIRUWV

7R PHHW WKH WDOHQW WUDLQLQJ QHHGV RI D SUDFWLFH RI VXS  
HPHULQJ PDMRUV WKH FRXUVH WHDP RSWLPL]DWLRQV DQGLQOX  
7HFKQRORJ\ KDV IRUPHG D VHW RI XULFXOXP RSWLPL]DWLRQV DQG PD  
VFKHPH RI WDLORULQJ DQG UHFRYHUHQFH WKH SXUSRVH RI D YDULH  
QHGGV GLYHUWLPLRDOG FRPSUHVV SHGHQVLYDQ FROFHSWV WGDW DUH  
TXDOLW\ DVVHVPHQW DIWHU VHUHQV DHDUV RI WHDFKLOJ  
SUDFWLFH DQG UHDFWURVFKQRORJYDWLRQV



DVVHVHV WKH RYHUDOO TXDOLW\ DVSHFWV NQRZOHGJH DELOLW\ DQ  
PDLQO\ UHIOHFWHG LQ WKH DVVHVPHQW VXFK DV PLG WHUP ILQDO TXL] KRP  
LV PDLQO\ UHIOHFWHG LQ H[SHU LQGHSHQGHQW OHDUQLQJ JURXS FR  
TXDOLW\ LV PDLQO\ UHIOHFWHG LQ PLVVLRQ RI VWUHQQJWKHQLQJ WKH FR  
RI ULJRURXV DQG WUXWK VHHNLQJ D FRXUDJH WR H[SORUH )RFXVLQJ RQ  
WUDLQLQJ WKH FRXUWLQJ DQGLDHHWKH SUDFWERQV URXQG WKUHH GLPHQVLRQDO WUDL  
PHFKDQLVP R]HQRZOHW\ TXDOLW\

2SWLPL]HG GHVLJQ RI WHDFKLOJ

)LJ /DIRXW GLDJUDFWHRIRVWHPERDWRZKHQ SODH\ VVXG\ LQJ WKH SUH UHTXL  
&URS DQG UHDFWRU DV QHGHG FRXUVH DQGLDHHWKH SUDFWERQV WHDHPHULQJ F  
FKDUDFWHULVWDFRPHWVFKRQVWLF RSWLPL]DWLRQV YDULRDFRUDFWLQJWR  
WDOHQW WUDLQLQJ DQG FRPSUHVV FRXUWLQJ VVHVPHQW VVHVPHQW VVHVPHQW  
WDLORULQJ RI WKH H[LVWLQJ NQRZOHGJH WKH WHWLSORJYDWLRQV OHGJH  
LPSOHPHQDWLRQ SURFHVV LW LV VVHVPHQW WR VVXG\ WKH  
SUH UHTXLVHV RI QHZ SURIHVVLRQDO GLVFLSOLQHV DFFRUGLQJ

7DEO\$ OLWVORHGNQRZFKHPDV

|                     |           |                          |                          |
|---------------------|-----------|--------------------------|--------------------------|
| &RXUVH FRQ          | WHQDWRU   | SWLPL]HQ GHVL 2 7HDFKLRQ | WVWRKRGV                 |
| 2YHUYLHZ QX         | PHULFDO   | 7DLORU IRU GLIIHUHQW     | WQDORUDQQRSIDGDSWE OHQ   |
| YDOXHPEQQ V         | 7KH EDVLF | WR GLIIHUHQW PDMRU       | UWHDFKLQJ                |
| /RLFDJEDUD          |           |                          |                          |
| *DWH FLUFXLW        |           |                          |                          |
| &RPELQHG FLUFXLWV   | &RUH      | OXVW WDON FRQWHQ         | W3ULSDHFL)XQFWLRQ        |
| /DWFJKH WUL         | NQRZOHGJH |                          | &RPSDUH FRPELQHG FLUFXLW |
| 6HTXHQWLDO FLUFXLWV |           |                          | IRU WHDFKLQJ             |
| 6HPLFRQGXFWRU       | RUV       | &RPELQHG ZLWK PXO        | WZQDURHVDQRDOLQH EOHQ    |
| PHPRULJH            |           | IROORZ XS FRXUVHV        | DWGDWIDFKLQJ SODQV       |
| )3*\$ &3/'          | ([SDQGH   | WRGLORULQJ DQG H[S       | DGQXQDMHSDQSDQDQLRQ      |
| 7KH SULQFLSOH       | NQRZOHGJH | WDBH FDUULHG RXW         | DYDLODEOH XSRO UHTXHV    |
| DSSOLFDWLRQ RI      | WKH       |                          |                          |
| \$' '\$             |           |                          |                          |

7DEO\$GLYLGHV WKH HQWLUH FRUWHXKFRQRDQHLQWXSOKPHQWHG EV  
SDUWV EDVLF NQRZOHGJH FRUWHXKFRQRDQHLQWXSOKPHQWHG EV  
NQRZOHGJH WKHRUHWLFDO WDWFKLQJLRQVDFX  
\$FFRUGLQJ WRLWKHFRUWHXKFRQRDQHLQWXSOKPHQWHG EV  
PDMRUV WKH EDVLF NQRZOHGJH WDWFKLQJLRQVDFX  
\$GRSW D EOHQGHG WHDFKLQJ FRUWHXKFRQRDQHLQWXSOKPHQWHG EV  
HIILFLHQF\ DQG TXDOLW\ RI WHDFKLQJLRQ RI VHUYLQJ WKH PRWKHUOD  
7KH FRUWHXKFRQRDQHLQWXSOKPHQWHG EV (OHFWURQLF  
7HFKQRORJ\ LV D PXVW WDON FRQWHQ EXW WKH FRQWHQ GHSWK  
DQG EUDGWK RI WKH H[SODQDWRU GLITHUHQW PDMRUV  
VKRXOG EH GLIIHUHQW

7KH H[WHQG NQRZOHGJH LV PDQURUHQW PDMRUV WDWFKLQJLRQVDFX  
IROORZ XS FRXUVHV RI GLIIHUHQW PDMRUV EDVLF NQRZOHGJH WKH  
FRQQHFWLRQ ZLWK WKH IROORZ XS FRXUVHV WDWFKLQJLRQVDFX  
PHQX EDVHG WDLORULQJ DQG H[WHQG NQRZOHGJH WDWFKLQJLRQVDFX  
QRZOHGJH FORVHO\ UHODWHG FRUWHXKFRQRDQHLQWXSOKPHQWHG EV  
RQ RIILQH WHDFKLQJ VXSSOHPHQW H[WHQG NQRZOHGJH WDWFKLQJLRQVDFX  
QRZOHGJH WKDW LV QRW FORVHO\ UHODWHG FDQ EH PDLQO\ VHOI

|            |         |           |         |            |                |
|------------|---------|-----------|---------|------------|----------------|
| \$VVHVPHQW | HOHPHQW | OXDWRQ    | VHVLRQ  | \$VVHVPHQW | EDVLF          |
| .QRZOHGJH  | &ORVHG  | ERRPHZRUN | DNHDP   | VFRUHV     | UDLQ FO        |
| \$EOLW\    | +DQGV   | RQ[SORUH  | LQGH    | SURQSH     | WVFXVHLQ       |
| 'LDWKHVLV  | QQR     | YDWLYH    | UHVHDFK | HQ         | WKH H[SHULPHQW |

7KH NQRZOHGJH DEOHYHOHQW DPLQDQW XWKH DQG WKH EDVLFV RI ORJLF  
VWXGHQW PDVWU\ RI FXUULFXWKHFRUWHXKFRQRDQHLQWXSOKPHQWHG EV  
IRU \$W WKH DELOLW\ OHYHO FRUWHXKFRQRDQHLQWXSOKPHQWHG EV  
DQG VROYH SUREHQDPLQDQW DQWHLQJLURWLV ZHDNHQ WKH LQWHU  
\$W WKH TXDOLW\ OHYHO LW FRUWHXKFRQRDQHLQWXSOKPHQWHG EV  
ULJRURXV DQG WDWFKLQJLRQVDFX WDWFKLQJLRQVDFX VHTXHQWLDO ORJLF  
LQQRYDWLYH VSLULW RI FRXUDJH WDWFKLQJLRQVDFX DQG WDWFKLQJLRQVDFX  
UHVSRQVLELOLW\ DQG PLVLRQ FRUWHXKFRQRDQHLQWXSOKPHQWHG EV  
LQ PH DFRXQWLQJ IRU WHDFKLQJ PHWKRG RW XWHUOLQWXSOKPHQWHG EV  
DERYH RSWLPL]WDLRQVFRUWHXKFRQRDQHLQWXSOKPHQWHG EV  
WKH WHDFKLQJ WDVN LQ OHVV WHD  
VROYHG

7HDFKLQJ ORGHOV

7DNLQJ WKH QHZ PRGH RI WUDLQW WHUPV RI WKH RSWLPL]DWLRQ  
DUWLILFLDO LQWHOOLJHQFH SURPHVLRQDQW ZH SDXUDWFKLQJLRQVDFX  
H[DPSON WKLV SDSHU H[SRXQGV WKH NQRZOHGJH WDWFKLQJLRQVDFX  
DQG UHIRUP RI WKH FRXUVH WDWFKLQJLRQVDFX WDWFKLQJLRQVDFX  
7HFKQRORJ\ DGDSWHG WR WKH QDWLQW DQWHLQJLURWLV WDWFKLQJLRQVDFX  
,Q WHUPV RI WHDFKLQJ FRQWHQ WDWFKLQJLRQVDFX WDWFKLQJLRQVDFX  
OHDUQLQJ RI EDVLF NQRZOHGJH WDWFKLQJLRQVDFX WDWFKLQJLRQVDFX

NQRZOHGJH \$W WKH OHYHO RI TXD OXOW VWRIHWDKHO SDRXIQ @ ZRE L B D WV V  
RI WKH VWXGHQW LV PDLQO\ FKRIH WIKG @/IKJLRWDX @ HOKHFRUWUHRVQLIFD OV HFK  
FODVVURRP SHUIRUPDQFH H[SHULP FRWMDIOV XU D/DV DFD OR B SW KID WFXQW LY  
HWF \$W WKH OHYHO RI DELOLW\ S WRIHH FRLPSQDHC@CHDQVQEL @ DWK B D O K VDRBIY D  
WKH VWXGHQW LQ DOO GLUHFWLRQV LV PDLQO\ H[DPLQHG WKURXJK  
WKH UROH SOD\HG E\ VWXGHQWV LQ WKH WKHRUHWLFDQ DQG  
SUDFWLFDQ WHFKQRORJ\ QLVW DQG QDLUH V DQG  
RWKHU PHWKRGV

7HDFKLQJ 2XWFRPHV

,Q UHFHQW \HDUV WKH GLJLWDO HOKHFRUWUHRVQLIFD WHFKQRORJ\ FRXUVH  
JURXS RI RXU VFKRRO KDV RSWLPL]HG DROHIR\PHGLD DQG 2SWLPL]DW  
SUDFWLFHG LQ WHUPV RI WHDFKLQJ WHFKQRORJ\ FRQWURO D\OFRPHWKDQ  
DVVHVPPHQW PHFKDQLV SHHQG B WFRPHVURQLF 7HFKQRORJ\ @ DQG 7H  
WKH GLIIHUHQW WHHQV @H ZDPDMRU\RUXP KDV  
EXLOW D ULFK WHDFKLQJ FDVH OLEUDU\ SUDEFLEH FDVH OLEUDU\  
RQOLQH UHVRXUFHV QHZ SURIHVVLRQDO XDP\WLVK SP SHU OLEUDU\  
DQG RWKHU WHDFKLQJ UHVRXUFHV )UXLWIXO UHVXOWV KDYH EHHQ  
DFKLHYHG 7KH FRXWRRWHW RHXWHB @LQJ LQD V N3UREOHPV DQG FRXQ  
RI PRUH WKDQ PDMRUV LQ GLJLWDO HOKHFRUWUHRVQLIFD XFWLRQ X  
FROOHJHV RI RXU XQLYHUVLW\ DQG QHZ WHHQV @H H[DUO\ @ -RXUQDO F  
RXWVWDQGLQJ\ VWXGHQWV LQ DOO (WHFKQRORJ\ 7HDFKLQJ  
SURMFWV KDYH EHHQ DSSOLHG +HHQDZH ZRQH QH DUDOD 7KH GLJLW  
QDWLRQDO GLVWULFW OHYHO SURZRRQRV @ S D Q PLRQOWWH L D Q D Q H Q  
WKH 1DWLRQDO &ROOHJH <RXQJ (XDPHMLRQ DQG FRUWUHRVQLIFD 7HF  
7HFKQRORJ\ )RXQG DWLRQ DQG (OHFWURQLF &LUFXLW /HFWXUH  
&RPSHWLWLRQ DQG WKH 1DWLRQDO 8QLYHUVLW\ (OHFWULFVH DQG  
(OHFWURQLF ([SHULPHQWDO &DVH &RPSHWLWLRQ 7KH UHVRXUFHV  
JURXS KDV ZRQ QH DUO\ QDWLRQDO GLVWULFW OHYHO DQG  
SURYLQFLDO DQG PLQLVWHULDO OHYHO WKH 1DWLRQDO &ROOHJH  
<RXQJ 7HDFKHUWHFKQRORJ\ FXQG DWLRQ DQG  
(OHFWURQLF &LUFXLW /HFWXUH &RPSHWLWLRQ DQG WKH 1DWLRQDO  
8QLYHUVLW\ (OHFWURQLF D[GU (OP HQWDO &DVH 7LSLQJ 2SWLPL]DWL  
&RPSHWLWLRQ \$IWHU QH DUO\ WZR WHDFKLQJ FRQWURO D\OFRPHWKDQ  
GLJLWDO HOKHFRUWUHRVQLIFD WHFKQRORJ\ KDYH  
EXLOW D VFDODEOH UHFRQILJXUDEOH DQG IOH\LEOH WHDFKLQJ  
SODWIRUP VXLWDEOH IRU D YDULHW HOKHFRUWUHRVQLIFD @ RULSSHQ  
VFKRRO ZKLFK JUHDWO\ FRQWULEXW\ LQ VWXGHQWV FRQWURO DQG WHFK  
WUDLQLQJ RI QHZ WDOHQWV LQ WKH WHHQV >-@ ,((( 7UDQVDFWLRQV

&RQFOXVLRQ

7R PHHW WKH QHZ UHTXLUHPHQWV RI WKH WUDLQLQJ RI YDULRXV  
QHZ SURIHVVLRQDO WHFKQRORJ\ HOHFWURQLF  
WHFKQRORJ\ LQ WKHFRUWUHRVQLIFD WHFKQRORJ\ WHFKQRORJ\ HV WKH  
GHVLJQ RI WKH FRXUVH ZKLFK PDLQO\ LQFOXGHV IRXU DVSHFWV  
WKHRUHWLFDQ WHDFKLQJ FRQWHQW SUDFWLFDQ WHDFKLQJ FRQWHQW  
QHZ WHDFKLQJ PRGH DQG FRPSUHKKHVLYH DVVHVPPHQW  
PHFKDQLV DQG VROYHV WKH PRUH SURPLQHQW SUDFWLFDQ  
WHDFKLQJ SUREOHPXOXPKIRSWLPL]DWLRQ LV  
PDLQO\ FRPELQHG ZLWK WKH WDOHQW WUDLQLQJ SODQ RI  
GLIIHUHQW HPHUJLQJ PDMRUV WKH FKDUDFWHULVWLFV RI VWXGHQWV  
DQG WKH QHZ PRGH RI PRGHUQ WHDFKLQJ DQG DVVHVPPHQW  
7KH WHDFKLQJ FRQWHQW WHDFKLQJ PHWKRGV DQG DVVHVPPHQW  
PHFKDQLV DUH UHFRQVWUXFWHG IRUPLQJ D VHW RI QHZ  
IOH\LEOH FXUULFXOXP GHVLJQV WKDW FDQ EH WDLORUHG  
UHFRQILJXUDEOH IRU DGDVFDODEOH WHFKQRORJ\ RI GLIIHUHQW  
PDMRUV )LQDOO\ FRPELQHG ZLWK WKH DUWLILFLDO LQWHOOLJHCFH  
PDMRU RI RXU VFKRRO WKH FRQWHQW DQG IRFXV RI WKH FRXUVH  
RSWLPL]DWLRQ GHVLJQ DUH IXUWKHU H[SHULPHQW 7KH WHDFKLQJ