

VXVH DQG DIQ ^VH I B D € V L Q J S U H V F U L S W L R Q S D L
\$ P H U L F D Q V G L H H Y H U \ G D \ D V D U H V X O W R I S U H V
@ W K D V L S F R V H Q W E W H R Q X V H G S U Y R Q
U D W H J L E V J W R F Z H F W E Y R G H H R Z E Q Q D U W X M X S O R W
D D G L O J W R F J F W X V R H H R Z E Q Q D U W X M X S O R W
X G Z Z W W R J D L Q P H H A E F N I R O Y F R V R M S H Z H E L Q D U V O L G H G H F N Z L W K
Y R O Y L Q J J P K W R U Y F K L F O H
Q G R X W V D Q G V X S S R U W L Q J P D W H U L D O V T U R P H G X F D W R U V D Q G Z H O O Q H V V
D P S L R Q V Z K R F R X O G S R W H Q W L D O O \ S U R Y L G H H P S O R \ H H V Z L W K D G Y L F H R Q
Z W R E H P R U H F R J Q L J D Q W R I S U H V F U L S W L R Q G U X J P L V X V H D E X V H > @
V L U H G R X W E R P H R I W K H Z H E L Q D U Z D V W R H G X F D W H Z R U N H U V R Q S U H V F U L S W L R Q
X J P L V X V H D E X V H V X X H V Z K R F R X O G X V H I W H Z E M Q D H D W M W D D H H H Y W R
V L V W Z H E N S O D P F H 3 U H Y P L Q W L F W E Q O H G W K H P V H O Y H V D
U S R V H R W K W V X D W P H Q W F H L R I U Q L W P S O H E F H R Q W K H F R W H G W D Q G W
H I X O Q H V S O K S H H V R W S H W W K H L U R U J D Q L J D W L R Q V S G H D
W K H V H G D W D S U R Y L G H V X S S R U W W K D W W K H Z
W K R G V

H U Y L H Z 3 W R F R X V K H V > @ , Q \$ P H U L F D Q V
H G R I G U X J R Y H U G R V H \ R I W K H W H L O Y R O Y H G S U H V F U L S W L R Q G U X J V
X D W H V W R V O L G S H R S O H D O P R V W S H R S O H D G D V
U H V H Q W D W L R Q W K D W G D W D F T X L U H G G X U L Q J W K L V Z H E L Q D U Z R X O G E H X V H G I R U
O D O V L V D Q G X S E O L F D W L B Q E X W W K H \ Z R X O G U H P D L Q F R P S O H W H O \
R Z L Q P R X V
H U H V D J U R Z L Q J L V V X H R I D G X O W S U H V F U L S W L R Q G U X J P L V X V H D Q G
X V H Z K L F K O H D G V W R S U R G X F W L Y L W \ F R V W V L Q W K H Z R U N H Q Y L U R Q P H Q W > @
S U R E O H P L V G L V W U L E X W H G Z L G H O \ D F U R V V W K H F R X Q W U \ D Q G L V D O D U J H
U G H Q W R R U J D Q L J D W L R Q V H V S H F L D O O \ Z K H Q H [D P L Q L Q J W K H F R P E L Q D W L R Q
F R V W V > @ : K L O H K H F R W \$ \cdot S D U W L F L S D Q W V L Q Y R O Y H G L Q W K H G L V F X V V L R Q

DO 9ROXPH k ,VVXH k

'DWD ZDV DQDO\VHG XVLQJ SDLUIZLVH FRPSDULVRQ WHFKQLTXHV
DOORZV IRU WKXV WRRM GDWD VR DV WR RQO\ DYRLG WKH PLVVVLQJ
GDWD ZLWKLQ D FDVH SHUPLWWLQJ WKH UHVW RI WKH GDWD UHPDLQLQJ LQ WKH
WR EH XVHG

3DUWLFLSDQWV

'DWD DFTXLUHG SULRU WR WKH ZHELQDU FDPH IURP SDUWLFLSDQWV
IHPDCH ZHUH DYORZWRVL[LWHP VXUYH\ GHVLJQHG WR DVVHV
SDUWLFLSDQW RSLQLRQV RQ SUHVFULSWLRQ GUXJ DEXVH DQG GHVLUH WR OHD
PRUH DERXW SUHYHSHW ZHEUQDQWV SDUWLFLSDQWV
ZHUH DVNHG WR SURYLGH D PRUH LQGHSHWK UHYLHZ RI WKH VOLGH GHFN DQG
RXW D SRVW VXUYH\ ZKLFK PHDVXUHG DWLWXGHV WRZDUG WKH ZHELQDU DQG
ZHELQDU

	0HDQ 6	\$JUHH 6WURQJO\ \$JUHH
, DP LQWHUHVWHG LQ JHWLQJ FHWLILHG LQ WKLW WUDLQLQJ		
0\ NQRZOHGJH DERXW SUHVFULSWLRQ GUXJV LPSURYHG		
, FDQ VHH ZD\ RI XVLQJ ZHELQDU FRQWHQW LQ P\ RZQ SUDFWLFH RU ZRUN		
, DP PRWLYDWHG WR OHDUQ PRUH DQG GR PRUH LQ WKH DUHD RI SUHYHQWLRQ LQ SUHVFULSWLRQ GUXJV		
, SODQ WR DFWXDO\ XVH FRQWHQW LGHDV LQ P\ ZRUN		
0\ SHUVSHFWLYH RQ KRZ WR GHDO ZLWK WKH ULVNV RI SUHVFULSWLRQ GUXJV LPSURYHG		

7DEOH WLWLW\ RI WKH SUHVHQWDWLRQ ,Q GHSWK UHYLHZHUV 1RWH /LNHUW
VFDOH DQFKRUV UDQJHG IURP a c6WURQJO\ 'LVDJUHHd WR a c6WURQJO\
\$JUHHd 6DPSOH VLJH

7DEOH VKRZV D QXPEHU RI UHVSQVHV WR WKH ZHELQDU WUDLQLQJ DQG

&LWDWURRQ SHU 0 %HQQHWW - *DOYLQ ' /XFDV * :RUNSODFH 3UHYHQWLRQ RI 3UHVFUL
HGXFDWLRQDO 3URJUDP - \$GGLFW 5HV 7KHU

3DJH RI

0D\RU(3%HNHUP3000\$*V :HELMZUSUWRRO IRSUOWHUQDWLYH \$SSURDFKHV WR 3DLQ 5HVHD
GHYHORSURQJHPVUWHVXUHV RQOLQH RU LQ SHUVRQ F 3DGGDQGDVWJ \$GGLFWLRQ =RJE\ S
\$IULFDQ -RXUQDO RI 2SKWKDOPRORJ\ +HUQDQGHJ 6+ 1HOVRQ /6 3UHVFULSW
OROD\ . %HVW 3UDFWLFWV IRU :HELQDUWKH HSLGHPLF &OHQDFDO 3KDUP DQG